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BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION
OF LITCHFIELD PARK SERVICE
COMPANY, AN ARIZONA
CORPORATION, FOR A
DETERMINATION OF THE FAIR VALUE
OF ITS UTILITY PLANTS AND
PROPERTY AND FOR INCREASES IN ITS
WASTEWATER RATES AND CHARGES
FOR UTILITY SERVICE BASED
THEREON.

DOCKET NO: SW-01428A-09-0103

IN THE MATTER OF THE APPLICATION
OF LITCHFIELD PARK SERVICE
COMPANY, AN ARIZONA
CORPORATION, FOR A
DETERMINATION OF THE FAIR VALUE
OF ITS UTILITY PLANTS AND
PROPERTY AND FOR INCREASES IN ITS
WATER RATES AND CHARGES FOR
UTILITY SERVICE BASED THEREON.

DOCKET NO: W-01427A-09-0104

IN THE MATTER OF THE APPLICATION
OF LITCHFIELD PARK SERVICE
COMPANY, AN ARIZONA
CORPORATION, FOR AUTHORITY (1) TO
ISSUE EVIDENCE OF INDEBTEDNESS IN
AN AMOUNT NOT TO EXCEED \$1,755,000
IN CONNECTION WITH (A) THE
CONSTRUCTION OF TWO RECHARGE
WELL INFRASTRUCTURE
IMPROVEMENTS AND (2) TO
ENCUMBER ITS REAL PROPERTY AND
PLANT AS SECURITY FOR SUCH
INDEBTEDNESS.

DOCKET NO. W-01427A-09-0116

Arizona Corporation Commission

DOCKETED

DEC - 2 2009

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1 IN THE MATTER OF THE APPLICATION
2 OF LITCHFIELD PARK SERVICE
3 COMPANY, AN ARIZONA
4 CORPORATION, FOR AUTHORITY (1) TO
5 ISSUE EVIDENCE OF INDEBTEDNESS IN
6 AN AMOUNT NOT TO EXCEED \$1,170,000
7 IN CONNECTION WITH (A) THE
8 CONSTRUCTION OF ONE 200 KW ROOF
9 MOUNTED SOLAR GENERATOR
10 INFRASTRUCTURE IMPROVEMENTS
11 AND (2) TO ENCUMBER ITS REAL
12 PROPERTY AND PLANT AS SECURITY
13 FOR SUCH INDEBTEDNESS.

DOCKET NO. W-01427A-09-0120

**NOTICE OF FILING REBUTTAL
TESTIMONY**

13 Litchfield Park Service Company ("LPSCO" or "the Company") hereby submits
14 this Notice of Filing Rebuttal Testimony in the above-referenced matter. Specifically
15 filed herewith are the Company's Rebuttal Testimonies, which include the following
16 testimonies, along with supporting schedules and/or attachments:

- 17 1. Rebuttal Testimony of Gregory S. Sorensen;
- 18 2. Rebuttal Testimony of Brian McBride;
- 19 3. Rebuttal Testimony of Thomas J. Bourassa (Rate Base); and
- 20 4. Rebuttal Testimony of Thomas J. Bourassa (Cost of Capital).

21 Per the Procedural Order dated November 23, 2009, the Company's rebuttal
22 testimony to intervenor PebbleCreek Properties Limited Partnership ("PLLP") is not due
23 until December 7, 2009. However, because the Company's motion to bifurcate was
24 granted, the Company has included its rebuttal testimony to PLLP with this filing, and
25 requests that PLLP provide its surrebuttal testimony on December 17, 2009, the same date
26 that the other parties are filing their surrebuttal testimonies.

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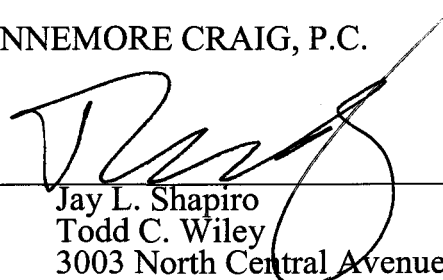
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1 DATED this 2nd day of December, 2009.

2 FENNEMORE CRAIG, P.C.

3
4 By


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10 **ORIGINAL** and nineteen (19) copies
11 of the foregoing were filed
12 this 2nd day of December, 2009, with:

13 Docket Control
14 Arizona Corporation Commission
15 1200 W. Washington St.
16 Phoenix, AZ 85007

17 **COPY** of the foregoing hand-delivered
18 this 2nd day of December, 2009 to:

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5
6 **BEFORE THE ARIZONA CORPORATION COMMISSION**
7

8 IN THE MATTER OF THE APPLICATION
OF LITCHFIELD PARK SERVICE
9 COMPANY, AN ARIZONA
CORPORATION, FOR A
10 DETERMINATION OF THE FAIR VALUE
OF ITS UTILITY PLANTS AND
11 PROPERTY AND FOR INCREASES IN
ITS WASTEWATER RATES AND
12 CHARGES FOR UTILITY SERVICE
BASED THEREON.

DOCKET NO: SW-01428A-09-0103

13 IN THE MATTER OF THE APPLICATION
14 OF LITCHFIELD PARK SERVICE
COMPANY, AN ARIZONA
15 CORPORATION, FOR A
DETERMINATION OF THE FAIR VALUE
16 OF ITS UTILITY PLANTS AND
PROPERTY AND FOR INCREASES IN
17 ITS WATER RATES AND CHARGES FOR
UTILITY SERVICE BASED THEREON.

DOCKET NO: W-01427A-09-0104

18 IN THE MATTER OF THE APPLICATION
19 OF LITCHFIELD PARK SERVICE
COMPANY, AN ARIZONA
20 CORPORATION, FOR AUTHORITY (1)
TO ISSUE EVIDENCE OF
21 INDEBTEDNESS IN AN AMOUNT NOT
TO EXCEED \$1,755,000 IN
22 CONNECTION WITH (A) THE
CONSTRUCTION OF TWO RECHARGE
23 WELL INFRASTRUCTURE
IMPROVEMENTS AND (2) TO
24 ENCUMBER ITS REAL PROPERTY AND
PLANT AS SECURITY FOR SUCH
25 INDEBTEDNESS.

DOCKET NO. W-01427A-09-0116

1 IN THE MATTER OF THE APPLICATION
2 OF LITCHFIELD PARK SERVICE
3 COMPANY, AN ARIZONA
4 CORPORATION, FOR AUTHORITY
5 (1) TO ISSUE EVIDENCE OF
6 INDEBTEDNESS IN AN AMOUNT NOT
7 TO EXCEED \$1,170,000 IN
8 CONNECTION WITH (A) THE
9 CONSTRUCTION OF ONE 200 KW ROOF
10 MOUNTED SOLAR GENERATOR
11 INFRASTRUCTURE IMPROVEMENTS
12 AND (2) TO ENCUMBER ITS REAL
13 PROPERTY AND PLANT AS SECURITY
14 FOR SUCH INDEBTEDNESS.

DOCKET NO. W-01427A-09-0120

11 **REBUTTAL TESTIMONY**

12 **OF**

13 **GREG SORENSEN**

14 **(Phase 1 – Determination of Rate Base and Rates)**

15 **December 2, 2009**

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1 **I. INTRODUCTION AND PURPOSE OF TESTIMONY**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Greg Sorensen. My business address is 12725 W. Indian School Road,
4 Suite D-101, Avondale, AZ 85392.

5 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

6 A. On behalf of the Applicant Litchfield Park Service Company ("LPSCO" or
7 "Company").

8 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

9 A. I am employed by Liberty Water, formerly known as Algonquin Water Services
10 ("AWS") as Director of Operations for the Western Group. For purposes of this
11 rebuttal testimony and this rate case, AWS and Liberty Water essentially can be
12 used interchangeably.

13 **Q. DID YOU PREVIOUSLY PROVIDE TESTIMONY ON BEHALF OF THE**
14 **COMPANY IN THIS CASE?**

15 A. Yes, my direct testimony was filed on March 9, 2009, with the Company's
16 application.

17 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

18 A. To further support LPSCO's application for rate relief by responding to certain
19 aspects of the direct testimony of Utilities Division Staff ("Staff"), and the
20 intervenors RUCO and the City of Litchfield Park (the "City").

21 **Q. WHAT ABOUT THE OTHER INTERVENORS, PEBBLECREEK AND**
22 **WESTCOR?**

23 A. For the most part, the testimony by PebbleCreek Properties Limited Partnership
24 ("PebbleCreek"), and the filing by Westcor/Goodyear LLC and Globe Land
25 Investors, LLC ("Westcor") address our request for hook-up fees. That aspect of
26 our application has now been moved into a second phase, so I will address their

1 testimonies on hook up fees in a separate volume of my testimony when a
2 procedural schedule governing Phase 2 is established.

3 **Q. YOU SAID “FOR THE MOST PART” WITH RESPECT TO**
4 **PEBBLECREEK. WHY?**

5 A. PebbleCreek’s recommendation that the Commission confiscate more than
6 \$4 million of used and useful plant has to be addressed in Phase 1 where LPSCO’s
7 rate base is being established.

8 **Q. HOW IS YOUR REBUTTAL TESTIMONY ORGANIZED?**

9 A. In the first two sections of my testimony, I will respond to certain
10 recommendations made by Staff and RUCO in their direct filings. In the last
11 section of my rebuttal, I will address the testimony by the City, and by
12 PebbleCreek, to the extent Mr. Zablisky’s testimony is germane to this phase of
13 this rate case.

14 **II. STAFF’S DIRECT FILING**

15 **Q. HAVE YOU REVIEWED STAFF’S DIRECT FILING?**

16 A. I have reviewed the testimony of Jeff Michlik and Marlin Scott, Jr. My only
17 rebuttal to Mr. Scott’s engineering report will come in Phase 2 when the HUFs are
18 addressed.

19 **Q. DO YOU AGREE THAT THE PLANT IDENTIFIED BY MR. SCOTT IS NO**
20 **LONGER USED AND USEFUL?**

21 A. Yes, Mr. Scott identifies these specific plant items in his engineering report.¹
22 These assets were physically retired years ago, but since the last rate case. I will
23 leave it to Mr. Bourassa to address the ratemaking implications of removing the
24 plant from rate base.²

25 ¹ Direct Testimony of Marlin Scott Jr., Report at 24.

26 ² Rebuttal Testimony of Thomas J. Bourassa (Rate Base – Phase I) at 7-8, 20.

1 Q. MR. MICHLIK RECOMMENDS EXCLUSION OF THE CENTRAL
2 OFFICE ADMINISTRATION COSTS ALLOCATED BY APIF. DO YOU
3 WISH TO RESPOND?

4 A. Yes. Staff is removing more than half a million dollars from LPSCO's operating
5 expenses. In recent rate cases for other utilities owned by Liberty Water, such as
6 the Black Mountain Sewer Corporation (BMSC) and Gold Canyon Sewer
7 Company (GCSC), the Commission expressed a strong preference for an actual
8 cost based shared-service model.³ Previously, our shared service model used
9 "market based rates" that included a profit. According to the Commission, it was
10 simply a no-no for an unregulated affiliate to ever earn a profit providing services
11 to regulated affiliates.⁴

12 After these decisions, we restructured our shared services model to a true
13 cost-based approach. This was consistent with the testimony in opposition to our
14 prior shared services model voiced by Staff in both cases, and consistent, we
15 believed, with similar models employed with approval by other holding companies
16 with utility subsidiaries regulated by the Commission. Now, with this rate case,
17 and five other Liberty Water utility providers before the Commission seeking new
18 rates, it appears to us that Staff went looking for even more costs to exclude.

19 Q. WAIT A MINUTE MR. SORENSEN, ARE YOU SUGGESTING THAT
20 STAFF SHOULD NOT SCRUTINIZE YOUR ADMINISTRATION COSTS?

21 A. Of course not. As I answered Judge Nodes in the recent BMSC rate case hearing,
22 we expect scrutiny of all of our expenses and investments, and even heightened
23 scrutiny of our affiliate transactions. As the last BMSC rate case ordered, our

24 _____
25 ³ *Black Mountain Sewer Corp.*, Decision No. 69164 (Dec. 5, 2006); *Gold Canyon Sewer Co.*, Decision No.
26 69664 (June 28, 2007).

⁴ *Id.*

1 affiliate transactions should be scrutinized to ensure there are no "potential
2 abuses."⁵ But such scrutiny is not the same as a presumption that we are doing
3 something wrong, nor does scrutiny preclude Staff from recognizing the
4 improvements that we have already made. Yet, in neither case to date has Staff's
5 witness pointed out to the Commission that we are operating in a substantially
6 changed manner as result of what we were criticized for before. Scrutiny also does
7 not mean that the costs, which represent services provided to the utility that are
8 needed and/or that enhance the utility's operations, financial stability and health, or
9 financial integrity, should be stricken from the Company's operating expenses.

10 **Q. DOES MR. MICHLIK ALLEGE THAT LIBERTY WATER'S SHARED**
11 **SERVICE MODEL IS ABUSIVE?**

12 A. No, Mr. Michlik does not allege that we are doing anything corrupt or deceptive.
13 He just believes that APIF is wrong by allocating more than 10 percent of a nearly
14 \$4 million cost pool to its numerous subsidiaries.⁶

15 **Q. WHY DOES MR. MICHLIK ASSERT THAT?**

16 A. Staff's position is that customers do not benefit from 90 percent of the costs
17 incurred by APIF that are passed down to the affiliates.⁷

18 **Q. THEN WHY DOES STAFF ALLOW 10 PERCENT OF THOSE**
19 **ADMINISTRATION COSTS?**

20 A. We don't know. Frankly, it looks like Mr. Michlik just adopted Ms. Brown's
21 position from the pending BMSC rate case.⁸ An analyst can always make
22

23 ⁵ *Black Mountain Sewer Corp.*, Decision No. 69164 (Dec. 5, 2006) at 19.

24 ⁶ Direct Testimony of Jeffrey M. Michlik for Wastewater Division ("Michlik WW Dt.") at 15-16.

25 ⁷ Direct Testimony of Jeffrey M. Michlik for Water Division ("Michlik W Dt.") at 17-18.

26 ⁸ Surrebuttal Testimony of Crystal S. Brown dated November 9, 2009 at Schedule CSB-17, Docket No. SW-01361A-08-0609.

1 recommendations that lower expenses, but I don't think either Staff witness has
2 shown that our costs are not reasonable, nor have they provided any support for the
3 90% figure, although I suppose they might respond then that it's better than
4 eliminating 100% of the costs.

5 **Q. HOW DO THE ADMINISTRATION COSTS INCURRED AT THE**
6 **PARENT LEVEL BENEFIT THE RATEPAYERS?**

7 A. The answer starts with why Liberty Water uses a shared services model in the first
8 place. It is because a shared services approach centralizes common costs and
9 spreads them across many companies. This is similar to how growth in a utility's
10 customer numbers can lower the per-customer impact, and almost always yields a
11 lower-cost result compared to a stand-alone entity. Staff agrees with the shared
12 services model. In fact, Staff's opinion in BMSC's last rate case was that it would
13 not be reasonable and prudent to operate each of our utilities on a stand alone
14 basis.⁹ In other words, I think everyone agrees that beneficial economies of scale
15 are achieved.

16 **Q. SO WHAT IS THE PROBLEM?**

17 A. For one thing, Staff is attempting to compare a shared services model with a
18 hypothetical stand-alone utility that provides the bare minimum of services to its
19 customers because it spends the bare minimum it has to in order to run its system.
20 Unfortunately, this narrow view ignores the fact that the shared services model
21 allows LPSCO, and all of Liberty Water's affiliates in Arizona, to obtain more and
22 better services than they ever could on a stand alone basis. With the increased
23 utility size comes some additional responsibilities, like audits, and costs, but these
24

25 _____
26 ⁹ Transcript from June 20, 2006 hearing at 778-779, *Black Mountain Sewer Corporation*, Docket No. SW-02361A-05-0657.

1 added costs are more than offset by the economies of scale achieved through a
2 shared services model.

3 For instance, the shared services model provides mid-size companies like
4 LPSCO, access to higher level personnel and expertise that it otherwise wouldn't
5 be able to at the prices that it receives them as part of the shared service group.
6 These personnel and third-party costs, at the Liberty Water and APIF level, include
7 billing clerks, telephone operators, plant operators, engineers, environmental and
8 health/safety experts, accountants, tax experts, and capital markets and strategic
9 management professionals. Because the costs of all of these people's expertise are
10 shared, every utility and every utility's ratepayers benefit. This is as much a part of
11 a shared services model as saving money on bulk paper and paper clips.

12 **Q. WOULDN'T LPSCO INCUR MANY OF THESE ADMINISTRATION**
13 **COSTS ON A STANDALONE BASIS?**

14 **A.** Yes, which is why the comparison breaks down when applied to LPSCO, with
15 more than 16,000 water and more than 16,000 wastewater customers, as compared
16 to BMSC with 2,000 sewer customers. It was easy for Staff to argue that a small
17 company like BMSC could live without certain things like professional tax services
18 and audits, even though, as BMSC argued, these things are part of a well operated
19 utility. But LPSCO is required to have its own annual audit, needs tax
20 professionals, and would incur significant expense to maintain the same access to
21 capital it has under the Liberty umbrella. LPSCO obtains all these things and more
22 at a significant discount as part of the shared services model when compared to the
23 amount it would incur on a stand alone basis.

1 **Q. ARE THERE OTHER BENEFITS OF THE SHARED ADMINISTRATION**
2 **COSTS FROM APIF THAT YOU CAN IDENTIFY?**

3 A. Yes. The APIF cost component of the shared services model also provides the
4 benefits of ensuring proper corporate governance and strategic planning. Much of
5 the total cost Staff proposes to exclude relates to the parent company's costs of
6 being a publicly traded company. However, those costs also represent costs
7 incurred to raise capital, including the capital that is raised for projects at LPSCO,
8 which has consumed substantial capital investment in the last few years. These
9 funds, including significant funding for work at the PVWRF, and for water projects
10 like the airline reservoir and arsenic treatment, have to be raised somehow. Yet
11 these costs are excluded under Mr. Michlik's adjustment. If APIF cannot allocate
12 the costs to support access to capital markets for its regulated subsidiaries in
13 Arizona, then those costs must not need to be incurred by those entities. But it will
14 be much harder if not impossible for LPSCO to obtain needed investment capital.

15 In summary, all of the benefits of the costs allocated by APIF inure to the
16 ratepayers because these costs allow us to provide adequate and reliable service at
17 all our utilities at less cost than each utility could be run on a stand alone basis.

18 **Q. HOW LARGE IS THE ADMINISTRATION COST POOL ALLOCATED**
19 **DOWN FROM APIF?**

20 A. The starting point is a test year pool of roughly \$5.1 million dollars of
21 administration costs. This is higher than the number Staff reviewed, as their
22 reviewed figure was the 2008 budgeted figure, not the actual test year costs. The
23 detail of the \$5.1 million has been supplied to the parties to audit. These costs
24 were incurred by Algonquin Power Trust ("APT"), which is the operating arm of
25 APIF. From the total pool, Staff recommended that approximately \$190,000 of
26

1 charitable contributions, gifts and the like be excluded.¹⁰ We agree. However, the
2 remaining \$4.9 million do benefit the subsidiaries and their customers as discussed.
3 A simple way to compare is to think of these costs as akin to the costs of operating
4 a central corporate headquarters. In that light, Staff's position is akin to arguing
5 that the Safeways in Phoenix do not obtain any benefit from the corporate
6 headquarters in Pleasanton, California.

7 Additionally, the pool of costs are allocated to both regulated and non-
8 regulated business divisions, first based upon the number of owned entities in the
9 respective Power and Utility Divisions. Therefore, since a majority of these costs
10 are actually allocated to unregulated, for profit entities, cost control for the pool in
11 total is still key, and the ratepayers of the regulated entities are not being unduly
12 burdened with a disproportionate share of the cost pool. I believe this was the type
13 of abuse the Commission legitimately directed Staff to scrutinize in the last BMSC
14 rate case.

15 **Q. DID THE COMPANY PROVIDE SUPPORTING DOCUMENTATION FOR**
16 **THE ADMINISTRATION COSTS INCURRED AT THE PARENT LEVEL?**

17 A. Yes, this cost pool was supported to Staff by an itemized list of every item in the
18 \$5.1 million cost pool. Additionally, we provided copies of invoices for all items
19 over \$5,000, and we offered to provide any additional invoices upon specific
20 request.

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25 ¹⁰ These costs include what can be loosely described as corporate perks, things like hockey tickets, and
26 other gifts. While these things are clearly part of any large business expenses, we have no intention of
arguing these costs should be passed down to the ratepayers.

1 **Q. HOW ARE THESE ADMINISTRATION COSTS ALLOCATED FROM**
2 **APIF?**

3 A. APIF owns 63 different facilities, 17 of which are regulated utilities in APIF's
4 Infrastructure Division. 17 divided by 63 is just under 27 percent (26.98% to be
5 exact), so 27 percent of the allocation pool is allocated to the Utilities Division
6 containing the 17 utilities owned and operated by Liberty Water. From there, the
7 costs are allocated between the 17 utilities based strictly on customer count. The
8 amount allocated to LPSCO during the test year was approximately 13% of the
9 total allocation pool, or \$518,441 based on a 2008 budget. The actual cost incurred
10 during the test year is \$642,877. LPSCO is the largest regulated utility owned by
11 Liberty Water.

12 **Q. DOES STAFF AGREE WITH THE ALLOCATION METHODOLOGY?**

13 A. No, Staff recommends using an allocation percentage for LPSCO of 1.41 percent
14 of the total costs pool based on LPSCO being 1 of 71 facilities.¹¹ This
15 methodology is flawed as it assumes that utilities of all sizes require the same
16 amount of resources, time and attention. For example, the simplified methodology
17 proposed by Staff would imply that a utility such as Northern Sunrise, with 350
18 ratepayers, would require the same amount of corporate resources as LPSCO. That
19 doesn't sound equitable.

20 **Q. MR. SORENSEN, WHY DOES STAFF CLAIM THAT ALGONQUIN HAS**
21 **71 FACILITIES WHEN YOUR TESTIMONY SAYS YOU ONLY HAVE 63?**

22 A. Staff includes facilities operated by APIF affiliates under operations contacts. We
23 do not own these facilities and they do not receive the same level of services as
24 LPSCO and the other Liberty Water regulated utilities. Their inclusion in the
25

26 ¹¹ Michlik WW Dt. at 16-17; Michlik W Dt. at 18.

1 allocation formula might lower the per-utility costs, possibly Staff's goal, but it
2 does not reflect operational realities.

3 **Q. THANK YOU MR. SORENSEN, DO YOU HAVE ANY OTHER**
4 **COMMENTS ON THE DISPUTE OVER ALLOCATION OF CENTRAL**
5 **ADMINISTRATION OFFICE COSTS?**

6 A. As a final note, I want to reiterate that while these costs are incurred in a non-
7 regulated entity, that should be seen as further benefit. I have never bought into the
8 argument that regulated utilities do not control their costs because they have
9 captive ratepayers, especially before this Commission. But, non-regulated entities
10 are constantly trying to cut their costs as each dollar cut falls to the bottom line as
11 profit. This has never been more true than during the recent economic downturn.
12 So, it is in APIF's interest to keep a close eye on its costs, including those in this
13 shared services model, as those costs are allocated to other non-regulated facilities
14 as well. In fact, significantly more costs are allocated to non-regulated entities than
15 are allocated to regulated ones.

16 Again, LPSCO and its ratepayers get the most possible benefit at the lowest
17 possible cost. That Staff does not see this is unfortunate, but it would be far more
18 unfortunate to gut our shared services model. Unlike last time, there will be no
19 way to restructure and retain all of the benefits. This means that the 7 utilities I
20 oversee in Arizona will likely see a decrease in the quality of service. I am not
21 going to get to share in the benefit if our systems do not share in the costs. I don't
22 see how that would be in the public interest given our growing track record.
23 Liberty Water has reduced odors and improved service at BMSC, GCSC and
24 LPSCO, and we have resolved the McLain Water Systems mess. The response, to
25 further reduce our costs, sends us the message we should not operate at such a high
26 level of service.

1 **Q. MR. MICHLIK ALSO PROPOSES THAT RATE CASE EXPENSE BE**
2 **NORMALIZED OVER 5 YEARS. DO YOU BELIEVE THAT IS**
3 **APPROPRIATE?**

4 A. No, although Mr. Michlik is correct that LPSCO has not been in for a rate case in 9
5 years, this was largely the choice of the prior developer-owner. Liberty Water has
6 already shown that it will bring rate cases on a more regular cycle in order to
7 ensure we recover our operating expenses and earn returns on investments at the
8 earliest possible date. In addition, since I am informed that Staff does not believe
9 that unrecovered rate case expense can be recovered in a future rate case, Staff's 5-
10 year normalization will place a large portion of the authorized rate case expense at
11 risk for non-recovery. I do not think the amortization should be more than three
12 years.

13 **Q. MR. MICHLIK ALSO REMOVED THE LEGAL AND WATER TESTING**
14 **COSTS THAT WERE DEFERRED IN AN ACCOUNTING ORDER. DO**
15 **YOU BELIEVE THAT IS APPROPRIATE?**

16 A. No. Mr. Michlik bases his adjustment on his mistaken belief that we have not
17 taken the steps contemplated in the accounting order.¹² Mr. Michlik is wrong.

18 **Q. WHAT LEGAL STEPS HAVE BEEN TAKEN TO RECOVER FEES FROM**
19 **PARTIES BELIEVED TO BE RESPONSIBLE?**

20 A. To date, we have utilized outside legal counsel to monitor the ongoing TCE Plume
21 regulatory and related proceedings, as well as to represent us in a group of West
22 Valley interested parties to assist, and sometimes prod, the EPA and Crane
23 (responsible party) to act appropriately and expeditiously. While we attend these
24 meetings as well (Matthew Garlick and myself), there are legal issues and
25

26 ¹² Michlik W Dt. at 13-14.

1 ramifications to things which we don't understand. Without counsel present, we
2 may miss important issues or opportunities. These meetings have been successful
3 to date in accelerating the clean-up effort, as well as stressing the importance of
4 reinjecting the treated water back into the local aquifer. This is protecting the
5 Company's and our customers' long term water supply.

6 Additionally, we have incurred testing costs for water testing in excess of
7 those performed by the EPA. We test monthly or quarterly, depending upon what
8 EPA test results are at their monitoring wells and other parties' wells in the area.
9 Since TCE was detected in the subunit C aquifer earlier this year, we have again
10 increased our testing to ensure the water supplied to our customers is not
11 contaminated. These types of costs are exactly what was anticipated in the
12 accounting order.¹³ Indeed, a significant portion of the costs sought for recovery in
13 this case were incurred between the time of notification by the EPA that the Plume
14 had moved (beginning in July 2006) and the time the Accounting Order was
15 granted in September, 2007.

16 **Q. BUT WHY HAVEN'T YOU GONE AHEAD AND FILED SUIT, AS MR.**
17 **MICHLIK SUGGESTS YOU SHOULD HAVE PER THE ACCOUNTING**
18 **ORDER?**

19 A. I do not agree that bringing a lawsuit was the only course of action contemplated in
20 the Accounting Order, Decision No. 69912 (September 27, 2007), nor do I think
21 the Commission wants us to file a premature lawsuit.

22 **Q. WHY WOULD IT BE PREMATURE?**

23 A. Because our wells have not yet exceeded the MCL for TCE. Until they do, no
24 legal action can rationally be pursued, other than working with the EPA, Crane,
25

26 ¹³ Michlik W Dt. at 13:4-15.

1 and other interested parties like the cities of Goodyear, Litchfield Park, and
2 Avondale, to best address the TCE situation and protect our customers. That is
3 what we have been doing, and the costs we have incurred are those we should now
4 be allowed to recover.

5 **Q. WHAT WOULD IT MEAN IF THE COMMISSION DISALLOWED THESE**
6 **COSTS?**

7 A. It would indicate that despite the Commission's prior order, the Commission does
8 not view it as reasonable and prudent for us to spend money testing our water to
9 make sure it is not polluted or participating in the legal process that might
10 ultimately lead to damages if our wells are impacted. So we will no longer incur
11 those costs and leave it to others to determine the future of our customers' water
12 supply. I find it difficult to believe this is the result the Commission intends to
13 promote.

14 **III. RUCO ADJUSTMENTS TO RATE BASE**

15 **Q. HAVE YOU REVIEWED RUCO'S DIRECT FILING?**

16 A. I have reviewed the testimony of Matt Rowell and Sonn Rowell, and the testimony
17 of Bill Rigsby on alleged excess capacity. I am also generally familiar with
18 RUCO's recommended cost of capital.

19 **Q. MR. RIGSBY FILED TESTIMONY ADDRESSING ONE RATE BASE**
20 **ISSUE - EXCESS CAPACITY. DOES LPSCO HAVE EXCESS**
21 **WASTEWATER TREATMENT CAPACITY?**

22 A. No, Mr. Rigsby's analysis is seriously flawed. The roughly \$36,000 Mr. Rigsby
23 refers to was for a preliminary, high level analysis of costs of plant expansion from
24 4.1 mgd to 8.2 mgd. Given that our plant flows are at or near 85 percent of our
25 existing physical capacity, this is reasonable and prudent utility planning required
26 by ADEQ. Apparently, Mr. Rigsby thinks that we should have waited until after

1 we built the additional capacity to do the planning the regulators require. But then,
2 Mr. Rigsby is focused on costs, not the realities of operating a plant like our
3 PVWRF.

4 **Q. WHAT ABOUT MR. RIGSBY'S TESTIMONY THAT THE COMPANY**
5 **OBJECTED TO DATA REQUESTS REGARDING THIS ISSUE?**

6 A. RUCO was asking for information regarding LPSCO's 8.2 MGD treatment
7 facility.¹⁴ There is no such facility, and that is what we explained in our objections
8 and responses. If RUCO had an issue with the objections and responses to data
9 requests saying we cannot give you information that does not exist or that we do
10 not have, I assume they would have gone to the ALJ. They have shown they know
11 the way to the court already in this case.

12 **Q. WHAT DO YOU MEAN BY THAT STATEMENT MR. SORENSEN?**

13 A. RUCO spent a month fighting with LPSCO over its witness Mr. Rowell's answers
14 to data requests and his deposition. As a result of RUCO's efforts, the Company
15 and its ratepayers incurred several thousand dollars of additional and unnecessary
16 rate case expense.

17 **Q. ARE YOU SUGGESTING THAT RUCO IS NOT ENTITLED TO**
18 **CHALLENGE DISCOVERY IT OBJECTS TO?**

19 A. No, but I am saying that when there appears to be no basis for the objection, they
20 should stop fighting and wasting everyone's time and money. I am not a lawyer,
21 but I read the Judge's order and agree with him that RUCO's arguments were just
22 "baffling."¹⁵ Our lawyers tried very hard to show them that before the fight went
23 to the Judge, but they seemed to prefer fighting. As a result, we incurred more rate
24 case expense.

25 ¹⁴ Direct Testimony of William A. Rigsby at 5:1-14.

26 ¹⁵ Procedural Order dated November 23, 2009 at 6:6.

1 Q. THANK YOU. RUCO ALSO RECOMMENDS A \$3.5 MILLION
2 REDUCTION TO LPSCO'S RATE BASE FOR UPGRADES AND
3 IMPROVEMENTS MADE SINCE IT WAS ACQUIRED BY ALGONQUIN.
4 DOES LPSCO AGREE WITH THIS ADJUSTMENT?

5 A. No, and quite honestly, RUCO's position makes me angry. Not just as the
6 manager of a utility or a businessman, but as a resident of this State. The upgrades
7 to the PVWRF were made to optimize our ability to treat wastewater and to
8 improve the lives and properties of the customers living near the plant by reducing
9 odors coming from an active wastewater plant. If a utility's need for operational
10 upgrades to improve service to its customers cannot or will not be met by its
11 owner, then it must be met by someone. In this case, that someone was Algonquin,
12 which bought LPSCO from Suncor. Mr. Rowell's position, if adopted, would set a
13 very dangerous precedent. It would tell potential purchasers of struggling utilities
14 that any investment made post-acquisition to fix the utility will have one-half of the
15 value confiscated. No purchaser would buy a utility under those circumstances.
16 And if I were a residential customer in the service area of one of those struggling
17 utilities, I would be furious, because the problems would never get fixed.

18 Q. WAS THE PLANT IN VIOLATION?

19 A. No, the PVWRF has never received a NOV, but, while this plant was operating in
20 full compliance, we certainly heard our neighbors' and the Commission's
21 collective voices during the past several years. They said the plant had odors, and
22 it did, like every wastewater treatment facility. There were also a couple of spill
23 incidents in 2007, made worse by operator indifference. In fact, the Commission
24 was so concerned that in Decision No. 69165 issued on December 5, 2006, the
25 Commission ordered LPSCO to resolve the odor issues as a condition of approval
26 for the Company's modified Off-Site Facilities Hook-Up Fee Tariff.

1 In that docket, Staff reviewed the Company's proposed odor control
2 upgrades and the Company's "project involving a series of upgrades to the
3 PVWRF."¹⁶ As stated in the October 18, 2007 Staff Report, those upgrades
4 included (1) odor control upgrades, (2) UV disinfection system upgrades,
5 (3) temporary centrifuge system upgrades, (4) influent screening upgrades,
6 (5) tertiary treatment pump stations upgrades, (6) solids handling upgrades,
7 (7) conversion of digesters to sequencing batch reactors, (8) headworks building
8 upgrades, (9) solids handling building upgrades and (10) equalization basin to
9 headwork recycle line.¹⁷ Put simply, the Commission and Staff fully supported the
10 Company's upgrades to the PVWRF to optimize reliability, redundancy and
11 service. Mr. Rowell and his client must not have been aware of these facts.

12 **Q. WHY WEREN'T THESE THINGS ADDRESSED WHEN THE ORIGINAL**
13 **FACILITY WAS CONSTRUCTED?**

14 A. None of us were there so we cannot speak with personal knowledge. What we do
15 know is that, between the time the utility was purchased by Algonquin from the
16 prior owner/developer and the time of the odor issue and spills (June 2007), the
17 load on the system greatly increased due to growth, and residential and commercial
18 development crept much closer to the plant, within 165 feet in fact. These
19 changing circumstances changed the operational paradigm for the Company, and
20 with the urging of the Commission, we undertook the upgrades that Mr. Rowell
21 now proposes to exclude.
22
23
24

25 ¹⁶ October 18, 2007 Staff Memorandum at 5, Docket No. SW-01428A-06-0444.

26 ¹⁷ *Id.*

1 Q. WHAT ABOUT MR. ROWELL'S CLAIM THAT YOU SHOULD HAVE
2 KNOWN ABOUT THE NEED FOR THESE IMPROVEMENTS WHEN
3 ALGONQUIN BOUGHT LPSCO?

4 A. First off, since the necessity for optimizing the plant did not become apparent until
5 after the purchase, Mr. Rowell's speculation isn't true. Second, we buy a lot of
6 assets that are distressed and then pay to bring them up to an adequate level of
7 service. RUCO's Director, Jodi Jerich, discussed our McLain acquisition in recent
8 testimony before the Commission.¹⁸ Other utilities, such as Global Water, have
9 acquired distressed companies and invested substantial capital to improve and
10 upgrade poorly designed or maintained facilities.¹⁹ To my knowledge, RUCO has
11 not suggested that such capital investments by other utilities should be reduced
12 from rate base and it is unfair and inconsistent for RUCO to make that suggestion
13 here. Yet, under RUCO's theory in this case, our costs to upgrade the McLain
14 water systems that the prior owner allowed to deteriorate to deplorable conditions
15 should not go fully into rate base. Again, why would we acquire a system or
16 systems that need investment and then make that investment only to earn a return
17 on half of it? We wouldn't, which means that Mr. Rowell's recommendation
18 strongly discourages the very type of investment that his client has testified should
19 be encouraged because it benefits the public.²⁰

20 Finally, and most importantly, is so what? Mr. Rowell does not claim we
21 acted imprudently, nor does he claim that the plant is not used and useful. What
22

23 ¹⁸ See Surrebuttal Testimony on Rate Design of Jodi A. Jerich dated August 12, 2009 at 8-10, Docket No.
24 W-01445A-08-0440.

25 ¹⁹ See Direct Testimony of Graham Symmonds dated February 20, 2009 at 2, 17, 30, 35, Docket No. SW-
03575A-09-0077, SW-20445A-09-0077.

26 ²⁰ Jerich Surrebuttal Testimony at 8-10, Docket No. W-01445A-08-0440.

1 we knew or didn't know when we bought the stock is totally immaterial to whether
2 we get a return on and of investment in used and useful plant.

3 **Q. WOULD THAT STILL BE TRUE IF THE 2008 UPGRADES TO PVWRF**
4 **WERE THE RESULT OF DESIGN ERRORS IN THE ORIGINAL PLANT,**
5 **AS MR. ROWELL SUGGESTS?**

6 A. Yes, although Mr. Rowell has not accurately stated the reasons for the 2008
7 upgrades or the engineering data pertaining to those upgrades. On page 4 of his
8 testimony, Mr. Rowell states: "LPSCO indicates that a large investment in plant
9 was necessary to remedy deficiencies at the PVWRF." Mr. Rowell then references
10 excerpts from page 7 of my direct testimony and a McBride Engineering Solutions,
11 Inc. draft report that Mr. Rowell claims "documents several design problems at the
12 PVWRF that resulted in excessive odors, insufficient reliability and lack of
13 redundancy capability." Mr. Rowell goes on to conclude that "the information
14 provided by LPSCO indicates that there were significant design problems at the
15 PVWRF. Correcting these problems necessitated significant upgrades."²¹
16 Mr. Rowell patently misstates my testimony and misconstrues the engineering
17 report from McBride.

18 **Q. WHAT DO YOU MEAN?**

19 A. To start, Mr. Rowell is not a registered engineer, licensed contractor or certified
20 operator of a wastewater treatment plant. As such, he is self-admittedly not
21 qualified to render any opinions, let alone professional opinions, relating to alleged
22 design problems at the PVWRF. Even worse, Mr. Rowell and RUCO have not
23 consulted any registered engineers regarding the original design and construction
24 of the PVWRF. I also would note that Mr. Rowell has not undertaken the
25

26 ²¹ M. Rowell Dt. at 4.

1 necessary professional analysis of the design issues, such as reviewing the original
2 design plans and report prepared by Pacific Advanced Civil Engineering
3 ("PACE"), reviewing the applicable regulatory requirements, engineering
4 standards and construction codes applicable to the plant as designed and
5 constructed in 2001 and 2002, and discussing any operational issues regarding the
6 plant with management personnel. At his deposition, Mr. Rowell admitted that he
7 never even bothered to review the original Phase I Design Report prepared by
8 PACE.

9 In short, all Mr. Rowell did was read limited portions of my direct testimony
10 and excerpts from McBride's draft engineering report, and then misconstrued and
11 took those statements out of context to support RUCO's desire to lower our rates
12 by taking away used and useful plant. What is even more troubling is RUCO's
13 attempt to use an economist to establish design and engineering errors in the
14 PVWRF as originally constructed.

15 **Q. DID YOU SUGGEST THAT WERE DESIGN ERRORS IN PVWRF AS**
16 **ORIGINALLY DESIGNED AND CONSTRUCTED?**

17 **A.** No. On page 7 of my testimony, I simply referenced operational challenges with
18 the plant that had arisen in 2006-2007. My testimony speaks for itself and I did not
19 say there were any design errors in the plant:

20 The PVWRF was originally constructed in 2002 and 2003.²²
21 It was financed initially with \$7.5 million of 6.7 percent debt,
22 with the remainder of the approximate \$18 million cost
23 financed with equity. The construction was completed just
24 prior to the purchase of LPSCO by Algonquin. The plant is
located on the north side of McDowell Road, about 1/4 mile
west of Litchfield Road in Goodyear, Arizona. The PVWRF
is currently permitted to process up to 4.1 MGD of sewage.

25 ²² Mr. Sorensen's direct testimony indicates that the PVWRF was originally constructed in 2002 and 2003.
26 That is a mistake. The PVWRF was constructed in 2001 and 2002.

1 The facility possesses an APP limited to 8.2 MGD for that
2 site. The original plant utilized an anoxic tank, two SBR
3 tanks, a surge tank and ultraviolet ("UV") disinfection to
4 produce A+ effluent and class A sludge. When the PVWRF
5 was designed and constructed, it received a setback variance
6 from the City of Goodyear and in turn ADEQ allowed an odor
7 easement of only 150 feet instead of the now minimum 350
8 feet. At that time the land use for the area surrounding the
9 plant was a small golf course with commercial office buildings
10 proposed....Needless to say, this created some new
11 operational challenges for the Company. In 2006 and 2007,
12 through a series of customer complaints, internal
13 investigations and Commission proceedings, it became
14 apparent that given the siting of the plant and the changed
15 zoning, the Company had an odor problem that needed to be
16 addressed. Additionally, in the summer of 2007, the plant had
17 two spill events that confirmed that the plant, as originally
18 designed and constructed by our predecessor owners, was
19 lacking certain redundancy capabilities and needed some
20 upgrades to achieve an acceptable level of reliability.²³

12 **Q. AS ORIGINALLY DESIGNED AND CONSTRUCTED, DID PVWRF MEET**
13 **ALL APPLICABLE ENGINEERING STANDARDS, CONSTRUCTION**
14 **CODES AND REGULATORY REQUIREMENTS?**

15 A. Yes, as originally designed and constructed, the plant met all applicable Maricopa
16 County Environmental Services Department, ADEQ and other regulatory
17 standards, regulations and approval. In fact, the plant engineering and construction
18 was reviewed, analyzed and approved by Maricopa County Environmental
19 Services Department and ADEQ. The plant was engineered by Pacific Advanced
20 Civil Engineering (PACE), a respected and qualified engineering firm. In October
21 2001, PACE prepared a Phase I Design Report for the PVWRF. On page 7 of that
22 report, PACE stated:

23 The design and construction of the Palm Valley WRF Phase I
24 will be in conformance with the following codes:

25
26 ²³ Sorensen Dt. at 6-7.

- MAG – Uniform Details and Standard Specifications for Public Works Construction - 1998
- City of Goodyear Engineering Standards and Policies Manual
- ADEQ Engineering Bulletin 11 – 1978
- Uniform Building Code (UBC) – 1997
- Uniform Plumbing Code (UPC) – 1997
- Uniform Fire Code – Latest Edition²⁴

Not only was the plant designed in accordance with applicable codes, but both Maricopa County and ADEQ reviewed the engineering and inspected construction of the plant, ultimately approving the plant. On these issues, Mr. Rowell simply does not have any basis for challenging the Phase I Design Report prepared by PACE, which was stamped by a registered engineer named James A. Matthews.

Q. WHAT WAS MCBRIDE ENGINEERING'S INVOLVEMENT ON THE PVWRF AND THE 2007/2008 UPGRADES?

A. After the plant operational challenges arose in 2006, LPSCO retained McBride Engineering Solutions to evaluate operational challenges at the Palm Valley Plant, and to engineer certain upgrades and improvements to the plant. We did not retain McBride to re-engineer or re-design the plant, or to correct any design errors in the plant, we hired McBride to evaluate various operational challenges at the plant, including odor problems. In March of 2007, we selected McBride to design process performance enhancements and improvements to the odor control system and the operation of the plant.

²⁴ Phase I Design Report dated October 2001 at 7.

1 **Q. WHAT DID MCBRIDE RECOMMEND?**

2 A. McBride conducted a review of the original designs, process and capacity studies,
3 interviewed LPSCO's operations staff and reviewed the various operational
4 challenges at the plant. McBride then provided a draft Water Reclamation
5 Facilities Strategic Planning Report to "show target areas where improvements
6 could be made to enhance the overall operation, reliability and costs effectiveness
7 of the plant."²⁵ In that report, McBride provided various options for upgrading and
8 improving the plant to enhance operations, improve reliability and make the plant
9 more cost effective.

10 **Q. DID MCBRIDE OPINE THAT THERE WERE ANY DESIGN ERRORS IN**
11 **THE ORIGINAL PLANT?**

12 A. No. In the Evaluation Report, McBride documented various operational challenges
13 at the plant. The report focused on various options for adding additional facilities
14 and processes to the plant to resolve the operational challenges.

15 **Q. WERE THOSE 2007/2008 UPGRADES CAUSED BY DESIGN ERRORS IN**
16 **THE ORIGINAL PLANT?**

17 A. No. Those 2007/2008 upgrades were improvements to the plant's system and
18 redundancy capabilities. Essentially, they were additions to the plant to optimize
19 performance, not repairs or remedies for any design problems.

20 **Q. DO THESE IMPROVEMENTS BENEFIT RATEPAYERS?**

21 A. Yes. Those upgrades resolved various operational problems with the plant that had
22 arisen since commissioning in 2002. This type of situation is typical in the utility
23 industry. In many cases, a wastewater treatment plant will be constructed in
24 accordance with approved engineering plans, but the plant will face operational
25

26 ²⁵ Draft Water Reclamation Facilities Strategic Planning Evaluation Report at 4.

1 challenges as the plant is operated at or near full capacity over several years.
2 LPSCO should be applauded for making the investment, albeit with some strong
3 nudging from the Commission, in necessary upgrades and additions to correct
4 operational challenges at the facility and provide a better long-term solution for
5 utility customers.

6 **Q. ON PAGE 7 OF YOUR DIRECT TESTIMONY, YOU REFERENCED TWO**
7 **SPILL EVENTS IN 2007, WHICH CONFIRMED THE PLANT WAS**
8 **LACKING CERTAIN REDUNDANCY CAPABILITIES AND NEEDED**
9 **SOME UPGRADES TO ACHIEVE AN ACCEPTABLE LEVEL OF**
10 **RELIABILITY. WHAT DID YOU MEAN BY THAT STATEMENT?**

11 **A.** I was referring to two spill events at PVWRF, which occurred in 2007. On
12 June 20, 2007, we had a 500 gallon spill due to disc filters being clogged and the
13 failure of the SCADA system to notify operators of high flow levels. On June 21,
14 2007, we had a 25,000 gallon spill due to grease and oil build up in the disc filters
15 at PVWRF. On that spill, we also had a plant operator who failed to respond.
16 Those spills were not the result of any design errors in the original plant, they were
17 the result of operational improvement opportunities made evident by increased
18 flows at the plant and challenges associated with operating the plant as it neared
19 full capacity.

20 In my testimony, I was pointing out that the plant needed additional
21 redundancy capabilities and upgrades to improve reliability as we reached higher
22 flows at the plant. Those upgrades were not necessary because of design errors in
23 the plant, but because of increased customer demand and various changed
24 conditions that were not present when the plant was constructed originally,
25 including changed zoning requirements, in-fill residential development, and
26 increased customer demands for more odor controls.

1 **Q. HOW DID THE COMPANY RESPOND?**

2 A. As noted in my direct testimony, the Company responded by spending
3 approximately \$7,000,000 in upgrades to improve PVWRF, including
4 (i) converting an aerobic digestion tank to a third SBR tank for
5 maintenance/redundancy purposes; (ii) converting the anoxic tanks to an
6 equalization basin; (iii) improving influent screening; (iv) adding a surge tank
7 return line; (v) installing additional and better UV disinfection equipment;
8 (vi) adding another dewatering centrifuge; (vii) upgrading and adding electrical
9 service to account for increased loads; and (viii) adding new odor control devices
10 at the plant.

11 Put simply, the 2008 upgrades were intended to increase reliability and add
12 redundancy to the Plant. For example, we converted existing digesters at the plant
13 into SBRs, which increased the number of SBRs at the plant to help to increase
14 operational reliability. I also can't stress enough that the need for upgrades or
15 improvements to a sewer plant often occurs after the plant has been in operation for
16 awhile, which is what happened at PVWRF.

17 **Q. ON PAGE 5 OF HIS TESTIMONY, MR. ROWELL STATES "UTILITIES**
18 **HAVE AN OBLIGATION TO DESIGN AND BUILD PLANT THAT MEETS**
19 **ACCEPTABLE LEVELS OF RELIABILITY. IT IS INHERENTLY**
20 **UNFAIR TO SADDLE CUSTOMERS WITH THE EXCESS AND**
21 **DUPLICATIVE COSTS THAT RESULT WHEN UTILITIES FAIL IN**
22 **THAT OBLIGATION." WERE LPSCO'S CUSTOMERS SADDLED WITH**
23 **ANY INCREASED OR DUPLICATIVE COSTS?**

24 A. No. Again, we obtained all necessary approvals. Moreover, the 2007/2008
25 upgrades resulted in various upgrades being added to the plant, which means that
26 customers were not previously charged for those upgrades. In fact, the PVWRF

1 was not put into rate base before this rate case, and customers have not incurred
2 any costs yet, additional or otherwise. If LPSCO had opted to add all of those
3 upgrades in 2001-2002, customers still would have had to bear the costs of those
4 facilities and upgrades to the plant in the original cost of the plant.

5 What RUCO and Mr. Rowell are actually suggesting is that customers are
6 harmed by the installation of facilities designed to reduce odors and noise and/or to
7 improve system reliability if they don't pay for those facilities at the time of initial
8 construction. Obviously, this is absurd. The real harm here would be to LPSCO if
9 RUCO's recommendation were adopted and LPSCO punished with the outright
10 taking of \$3.5 million of used and useful plant.

11 Additionally, one should consider the alternative scenario. If we had put the
12 2007/2008 upgrades into the plant in 2001/2002, then someone may have
13 contended that those improvements were not necessary at that time because the
14 various changed circumstances and operational challenges did not occur until after
15 2002. Had we put those upgrades in place in 2001-2002, we likely would have
16 come in for a rate case much earlier than 2008, and the upgrades would have been
17 made but never truly needed at that time. In the real world, what was done is the
18 Company waited until a situation arose whereby the clear need for the
19 improvements arose, and we made those improvements. One could argue that we
20 made them a year later than we should have, but they were made prudently, and
21 those improvements are now used and useful in the provision of service to our
22 customers.

1 Q. LIKE STAFF, RUCO ALSO RECOMMENDS AN ADJUSTMENT TO THE
2 CENTRAL OFFICE COSTS ALLOCATED AS PART OF YOUR SHARED
3 SERVICES MODEL. DO YOU WANT TO ADDRESS RUCO'S POSITION
4 AS WELL?

5 A. Yes. I believe the starting point is that RUCO has not taken a consistent position
6 on the Central Office cost allocation. In the pending rate case for BMSC, RUCO
7 did not challenge the allocations, which used the same cost pool and methodology
8 as in this case. I cannot explain this obvious inconsistency, but I can testify that
9 Mr. Rowell's testimony is flawed in several ways.

10 First, Mr. Rowell admits that the costs provided by Liberty Water are
11 necessary for the provision of service, but that the reconciliation to the 4 factor
12 methodology should be disallowed.²⁶ During the test year, the Company changed
13 its methodology on charging Liberty Water, then AWS, costs to the utilities. The 4
14 factor methodology, which was in use by the end of the test year, was the one that
15 was used for our reconciliation. It is illogical to accept the costs and the
16 methodology, but not to accept the true-up. This was clearly explained to
17 Mr. Rowell in Company response MJR 2.4.²⁷ At his deposition, Mr. Rowell
18 further acknowledged that it would be appropriate for LPSCO to reconcile and
19 true-up the calculation of the 4 factor methodology.

20 Second, Mr. Rowell argues that the costs allocated from APT don't match
21 the costs provided in discovery response JMM 5.3.²⁸ This is because he is
22 comparing the actual charges for the test year (which encompasses 2007 and 2008)

23
24 ²⁶ M. Rowell Dt. at 11-12.

25 ²⁷ Data request responses referenced herein are not attached, however, copies were provided to Staff,
26 RUCO, and the other intervenors who requested them.

²⁸ M. Rowell Dt. at 13.

1 versus the budget amount for calendar 2008, which was included in the initial
2 filing. Mr. Bourassa addresses this issue in volume 1 of his rebuttal.

3 **Q. WHAT ABOUT THE INCREASE TO MANAGEMENT FEES THAT**
4 **MR. ROWELL CLAIMS WAS NOT EXPLAINED?**

5 A. The management fee that was in place prior to 2008 was the allocation of corporate
6 administration costs based on 2003 estimates. The allocation had never been
7 changed for all years until January of 2008, and had never been trued-up to actual
8 costs, but obviously should have been done each year. However, the fact that
9 operating costs incurred prior to the test year were not trued-up has no bearing on
10 the actual operating costs in the test year itself. The Company is now looking at
11 reviewing its corporate allocation of administration costs on a quarterly or yearly
12 basis.

13 Additionally, on page 13 of his testimony, Mr. Rowell refers to
14 "Management Fees." The costs he refers to are actually a myriad of Central Office
15 Administration costs that are incurred, including those for trustee fees,
16 management fees, unit holder communications, other professional services (i.e.
17 maintenance of the ERP system), general office costs, public registrant fees, and
18 depreciation expense. The monthly invoice from APT to LPSCO may have said
19 "Management Fees," but that was only for the sake of brevity.

20 **Q. THANK YOU, PLEASE CONTINUE WITH YOUR DISCUSSION OF THE**
21 **FLAWS IN MR. ROWELL'S POSITION.**

22 A. Third, Mr. Rowell argues that the cost pool definitions are vague.²⁹ In Company
23 responses MJR 2.4 and MJR 2.5, we gave clear definitions of the cost pools and
24 what types of costs go into each one. For example, Tax Services are clearly
25

26 ²⁹ M. Rowell Dt. at 13.

1 defined as tax planning and preparation services required for Liberty, and in turn,
2 LPSCO. Audit costs are clearly defined as costs required to provide audit services
3 to APIF/APT, and in turn, LPSCO. LPSCO, which has bonds issued, must have
4 audits conducted, in addition to it simply being a good business practice for an
5 entity of LPSCO's size. Of course, LPSCO obtained audit services at a reduced
6 price as part of the APIF family. If Mr. Rowell had specific concerns, he was
7 certainly free to ask additional questions on any of the cost pools after we provided
8 this information. Instead, he chose simply to disallow all costs he felt he did not
9 understand.

10 **Q. DO YOU AGREE THAT IT IS THE COMPANY'S BURDEN TO SUPPORT**
11 **ITS COSTS?**

12 **A.** Yes, and I believe we have. Unknown person-hours have been spent compiling
13 information and answering data requests by Staff and RUCO, in this case and in
14 each of the pending rate cases involving a Liberty Water affiliate. There are
15 hundreds to thousands of pages of documents involved here and we are willing to
16 do more. Still, based upon his deposition, Mr. Rowell still seems to be suffering
17 some ongoing misunderstanding of the Central Costs, their nature, their benefit to
18 ratepayers, their allocation methodology, and the detriment that would be suffered
19 by the Company and the Company's ratepayers if these costs and their underlying
20 services are eliminated in this case.

21 As such, the Company will update some prior data requests from RUCO
22 related to the Central Office Costs to help clarify the costs, benefits, and allocation
23 process, so that confusion or perceived lack of information doesn't prevent the
24 inclusion of these needed costs. Additionally, Mr. Rowell and Staff's witnesses are
25 welcome to spend time in our offices here and in Oakville, Ontario, where we will
26 fly them there and put them up at our own expense to the extent allowed to do so

1 under applicable rules and policies. In the end, we can and will, if allowed,
2 continue our efforts to educate them, because we certainly have nothing to hide.
3 But we can't be expected to guess at what else RUCO's and Staff's witnesses think
4 they need to scrutinize our costs.

5 **Q. THANK YOU. ARE THERE ANY OTHER FLAWS IN MR. ROWELL'S**
6 **TESTIMONY YOU WOULD LIKE TO ADDRESS?**

7 A. Next, Mr. Rowell mentions that we do not have and do not plan to have an
8 allocation manual.³⁰ While this has not precluded us from providing everything
9 asked for in discovery, it is a good suggestion and we are undertaking to do so.
10 Hopefully enough of our process will remain after these rate cases for the manual
11 to be useful.

12 **Q. WHAT ABOUT MR. ROWELL'S ASSERTIONS ABOUT RELATED**
13 **PARTIES AND APT'S ABSENCE ON ALGONQUIN'S CORPORATE**
14 **STRUCTURE?**

15 A. Mr. Rowell asserts that Algonquin Power Property Limited Partnership ("APPLP")
16 is an affiliate likely based on the common term "Algonquin."³¹ APPLP owns the
17 corporate office located at 2485 Bristol Circle in Oakville, Ontario, which is
18 partially rented by Liberty Water. The building is leased at prevailing market rates
19 and a formal lease arrangement exists between APPLP and APT.

20 Further, Mr. Rowell attests that the organization chart the Company
21 provided is incorrect because it does not show Algonquin Power Trust (APT) on
22 it.³² While APT is not shown as a box on the chart, the narrative description to
23 Company response 1.17 clearly states "...LPSCO is directly owned by Algonquin

24 ³⁰ M. Rowell Dt. at 14.

25 ³¹ M. Rowell Dt. at 14.

26 ³² M. Rowell Dt. at 14.

1 Water Resources of America which is ultimately owned by Algonquin Power
2 Income Fund. Direct day to day operations are provided by Algonquin Water
3 Services, limited engineering services are provided by Algonquin Power Systems,
4 and administration support is provided by Algonquin Power Trust.”

5 **Q. OKAY, SWITCHING GEARS NOW, RUCO ALSO RECOMMENDS A**
6 **SUBSTANTIAL INCREASE IN THE RATE FOR EFFLUENT. DO YOU**
7 **BELIEVE THAT WOULD BE IN THE PUBLIC INTEREST?**

8 A. Not if the increased rate discourages use of effluent, something RUCO did not
9 evaluate. Absent evidence otherwise, I believe the significantly higher price
10 RUCO recommends will decrease the usage significantly, thus increasing the use
11 of groundwater for irrigation and our costs for disposal, assuming we can even
12 dispose of all the effluent without our usual buyers. Such costs outweigh the short-
13 term benefit of shifting recovery of the revenue requirement away from our
14 residential customers and towards our effluent users. It must be remembered, they
15 provide us a service too – disposal of the huge amounts of effluent we produce
16 running a plant that treats some 4 million gallons of wastewater per day.

17 **Q. SO WHAT DOES LPSCO RECOMMEND?**

18 A. The Company’s current tariff allows for “market rates” to be charged. This allows
19 the Company to increase the effluent rates more slowly, responding to market
20 conditions, without discouraging the use of effluent. We do not think this should
21 be changed in this rate case.

1 **IV. REBUTTAL TO INTERVENORS PEBBLECREEK AND CITY OF**
2 **LITCHFIELD PARK**

3 **Q. ARE YOU FAMILIAR WITH THE DIRECT FILINGS MADE BY THE**
4 **CITY AND PEBBLECREEK AS INTERVENORS?**

5 A. Yes, although I will confess I did not review every word of Mr. Zeblisky's drawn-
6 out and self-serving attempt to reconstruct ancient developer history because most
7 of his direct testimony deals with hook-up fees and his developer client's request
8 for special treatment. Those issues will now be dealt with in Phase 2 of this rate
9 case. I also did not carefully analyze the City's witness Mr. Darnall's discussion of
10 Mr. Bourassa's cost of service study, as I left that to Mr. Bourassa to address. But
11 I was forced to become very familiar with those aspects of both Mr. Darnall's and
12 Mr. Zeblisky's testimony that I address in my rebuttal below.

13 **Q. WHY DO YOU SAY "FORCED" MR. SORENSEN?**

14 A. Unfortunately, it appears that both PebbleCreek and the City have chosen to
15 engage in the same tactic of attack in order to get what they want. As a result of
16 these tactics, I am forced to provide LPSCO's response.

17 **A. Rebuttal to PebbleCreek on Rate Base.**

18 **Q. CAN YOU PROVIDE AN EXAMPLE OF WHAT YOU MEAN?**

19 A. Yes. PebbleCreek has intervened to "challenge the hook up fees" requested.³³ We
20 have no issue with the intervention on those grounds, although Mr. Zeblisky's
21 testimony seems to go well beyond what is necessary to do so. We do take serious
22 issue with Mr. Zeblisky's recommendation that the Commission go outside the test
23 year to bring in over \$4.8 million of advances that was part of the Westcor/LPSCO
24
25
26

³³ Zeblisky Dt. at 3.

1 settlement agreement before the Commission in October 2008.³⁴ This adjustment
2 is not material to the hook-up fee PebbleCreek sought to challenge, but it is
3 material to LPSCO as it would result in a confiscation of more than \$4.8 million of
4 rate base.

5 **Q. WHY IS THAT?**

6 A. Because we received an advance in aid of construction from Westcor of
7 approximately \$4.8 million dollars shortly after we settled and received the
8 necessary Commission approval, and then shortly thereafter, Westcor postponed
9 the project for several years. Now there is no plant to go into Plant in Service to
10 offset the \$4.8 million Mr. Zeblicky wants deducted from rate base, meaning
11 \$4.8 million of used and useful plant funded by the shareholder will be deducted.
12 LPSCO will not allow that to happen.

13 **Q. HOW CAN YOU PREVENT IT?**

14 A. We are in the process of returning Westcor's advance in aid of construction in the
15 amount of over \$4.8 million. We simply cannot take the risk that the unanticipated
16 delay in their project will cost us \$4.8 million of rate base because the Commission
17 saw fit to adopt PebbleCreek's suggestion.

18 **Q. THE MONEY HAS NOT YET BEEN RETURNED?**

19 A. No, we wanted to first evaluate the impact of doing so in light of the settlement
20 agreement with Westcor and the Commission order. We also felt that we should
21 discuss the matter with Westcor and let them know how PebbleCreek's
22 intervention may cost them more for sewer capacity sometime in the future. We
23 intend to return their money by the time we make our rejoinder filing in this matter.
24

25 ³⁴ Westcor/Goodyear, L.L.C. and Globe Land Investors, L.L.C. v. *Litchfield Park Service*
26 *Company*, Decision No. 70563 (October 23, 2008).

1 **Q. BUT WON'T THAT BE OUTSIDE THE TEST YEAR?**

2 A. Yes, as was the acceptance of the advance from Westcor in the first place. If we
3 can lose rate base for accepting an advance pursuant to a settlement outside the test
4 year, then we must be allowed to avoid the taking of our property by making
5 another known and measurable change outside the test year.

6 **Q. SHOULD THE COMMISSION ADOPT MR. ZEBLISKY'S**
7 **RECOMMENDATION?**

8 A. No, I think it would be inequitable to punish us for settling a case with a developer
9 that was in a hurry to build a very large regional development project supported by
10 the City of Goodyear because after the settlement the developer unilaterally
11 postponed the project. In fact, this position is now discouraging the Company from
12 collecting funds from developers to build future plant needed for their
13 developments. Again, I believe this type of position to be very short-sighted and
14 discourages the type of "growth pay for growth" strategy that I believe this
15 Commission encourages.

16 **Q. IF LPSCO BELIEVES IT WOULD BE INEQUITABLE TO GRANT THE**
17 **RELIEF MR. ZEBLISKY RECOMMENDS, WHY GIVE WESTCOR THE**
18 **MONEY BACK?**

19 A. Because we simply won't take the risk that the Commission will adopt
20 PebbleCreek's recommendation as a means of lowering our revenue requirement
21 by taking away \$4.8 million of rate base.

22 **B. Rebuttal to City of Litchfield Park**

23 **Q. WHY HAVE YOU INCLUDED THE CITY IN YOUR CRITICISM?**

24 A. On his way to addressing two issues fairly raised in this rate case, the City's hired
25 expert, Mr. Darnall, takes a shotgun approach to attacking LPSCO. He throws out
26 a rash of conclusory and unsupported statements about our operations and our

1 motives, but none of these issues is germane to what appears to be the City's real
2 goal – a special municipal rate for water.³⁵ This type of “throw it up and hope it
3 sticks” tactic just exacerbates rate case expense and distracts the focus from real
4 issues.

5 **Q. CAN YOU PROVIDE AN EXAMPLE OF WHAT YOU MEAN, MR.**
6 **SORENSEN?**

7 **A.** Mr. Darnall admits that he did not do a comprehensive review of LPSCO,
8 nevertheless, he tosses out 9 issues that he suggests could impact the
9 reasonableness of rates and therefore warrant close examination by the
10 Commission.³⁶ Perhaps Mr. Darnall should have done the comprehensive analysis
11 first. His testimony, which implies that we are doing something wrong by finally
12 seeking the opportunity to earn a just and reasonable return on the tens of millions
13 of dollars we have invested in Arizona, is ludicrous and a waste of everyone's time,
14 unless he is going to do the analysis he claims needs to be done, and which must be
15 done if his aspersions are to be validated.

16 For instance, had he conducted a thorough analysis, he might not have
17 criticized us for having several rate cases pending. Apparently, Mr. Darnall is
18 unaware that the rate cases for the two Sunrise water companies were ordered by
19 the Commission after we took over the disaster formerly known as the McLain
20 companies. He also appears unaware that Bella Vista Water Company filed at the
21 same time, also with the Commission's blessing, so that we can seek the
22 consolidation of the three companies, hopefully removing the memory of the
23 McLain water systems.

24
25 ³⁵ Direct Testimony of Richard L. Darnall (“Darnall Dt.”) at 7.

26 ³⁶ Darnall Dt. at 2-3.

1 Likewise, Mr. Darnall does not seem to be aware that the rate increases he
2 criticizes for Gold Canyon Sewer Company represented primarily a return on and
3 of more than \$10 million dollars of plant investment this Commission already
4 found prudent and reasonable, or that the pending rate increases for BMSC are
5 largely the result of Commission ordered plant improvements to make life better
6 for our customers in that system. With regard to Rio Rico Utilities, I also don't
7 find it very honest to criticize the requested rate increase for water service but not
8 mention the pending rate decrease we voluntarily sought for sewer service at the
9 same time.

10 Put bluntly, we have made substantial investment in every system Liberty
11 Water owns in this State, and we are providing a high level of safe and reliable
12 service everywhere we operate. We shouldn't have to explain to Mr. Darnall or
13 this Commission why we now want the opportunity to recover our operating
14 expenses and earn a return on and of our substantial investment, as we are entitled
15 to do under the law.

16 **Q. THANK YOU MR. SORENSEN. TURNING BACK TO THIS RATE CASE**
17 **THOUGH, WHY DIDN'T LPSCO COME IN SOONER?**

18 **A.** Algonquin, now Liberty Water, acquired this system in February 2003.
19 Commencing in 2005, we began investing millions of dollars to improve the water
20 and wastewater utility systems, largely by completing projects that were planned
21 and in some cases underway, and by installing facilities to meet the new federally
22 mandated arsenic standards. It took us a little while to get grounded and figure out
23 what order to tackle the system's needs. I guess we could have filed one or more
24 rate case(s) in the midst of that, and then spent hundreds of thousands of dollars
25 fighting over CWIP, used and useful, excess capacity and operating expenses that
26 don't match plant. Instead, we accepted the carrying costs in this situation and

1 came in when we felt like we had completed the compelling list of necessary
2 projects we purchased with the system.

3 **Q. SO THE SHAREHOLDER KNEW THAT IT WOULD HAVE TO MAKE**
4 **SUBSTANTIAL INVESTMENT WHEN IT ACQUIRED LPSCO?**

5 A. Sure, it did its due diligence as I discussed above. And the shareholder was
6 interested in investing capital in Arizona at the time and earning a return on and of
7 that capital. Despite Mr. Darnall's implication, that is all we are asking for now,
8 for LPSCO and all the other places where we have invested capital to dramatically
9 improve the service received by ratepayers.

10 **Q. WHAT ABOUT MR. DARNALL'S SUGGESTION THAT THE**
11 **COMMISSION APPROVE A "MUNICIPAL RATE"?**

12 A. If this is all the City wanted, it would have been nice if it just said so instead of
13 hiring an expert to cast admittedly unsupported aspersions about what is wrong
14 with our rate filing and entire operations here in Arizona. But it is also difficult to
15 take any of the requests in Mr. Darnall's testimony seriously, given that he did not
16 undertake a comprehensive review of the application, nor does he even suggest
17 what this municipal rate should be or how it should be derived. I also hope that
18 Mr. Darnall and his client realize that the special municipal rate they desire will
19 come at the cost of their citizens, as they would be asked to subsidize the special
20 rate the City wants.

21 **Q. DOES LPSCO OPPOSE A MUNICIPAL RATE?**

22 A. Not in theory. If the Commission believes that our ratepayers should subsidize the
23 City's purchases of water for municipal purposes, then a municipal rate can be
24 approved. It just means that we will collect more of the revenue requirement from
25 the rest of our customers, as we would expect the subsidy of municipal water use to
26 be shared equally among all customer classes.

1 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

2 A. Yes.

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5
6 **BEFORE THE ARIZONA CORPORATION COMMISSION**
7

8 IN THE MATTER OF THE APPLICATION
OF LITCHFIELD PARK SERVICE
9 COMPANY, AN ARIZONA
CORPORATION, FOR A
10 DETERMINATION OF THE FAIR VALUE
OF ITS UTILITY PLANTS AND
11 PROPERTY AND FOR INCREASES IN
ITS WASTEWATER RATES AND
12 CHARGES FOR UTILITY SERVICE
BASED THEREON.

DOCKET NO: SW-01428A-09-0103

13 IN THE MATTER OF THE APPLICATION
14 OF LITCHFIELD PARK SERVICE
COMPANY, AN ARIZONA
15 CORPORATION, FOR A
DETERMINATION OF THE FAIR VALUE
16 OF ITS UTILITY PLANTS AND
PROPERTY AND FOR INCREASES IN
17 ITS WATER RATES AND CHARGES FOR
UTILITY SERVICE BASED THEREON.

DOCKET NO: W-01427A-09-0104

18 IN THE MATTER OF THE APPLICATION
19 OF LITCHFIELD PARK SERVICE
COMPANY, AN ARIZONA
20 CORPORATION, FOR AUTHORITY (1)
TO ISSUE EVIDENCE OF
21 INDEBTEDNESS IN AN AMOUNT NOT
TO EXCEED \$1,755,000 IN
22 CONNECTION WITH (A) THE
CONSTRUCTION OF TWO RECHARGE
23 WELL INFRASTRUCTURE
IMPROVEMENTS AND (2) TO
24 ENCUMBER ITS REAL PROPERTY AND
25 PLANT AS SECURITY FOR SUCH
INDEBTEDNESS.

DOCKET NO. W-01427A-09-0116

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3 COMPANY, AN ARIZONA
4 CORPORATION, FOR AUTHORITY
5 (1) TO ISSUE EVIDENCE OF
6 INDEBTEDNESS IN AN AMOUNT NOT
7 TO EXCEED \$1,170,000 IN
8 CONNECTION WITH (A) THE
9 CONSTRUCTION OF ONE 200 KW ROOF
10 MOUNTED SOLAR GENERATOR
11 INFRASTRUCTURE IMPROVEMENTS
12 AND (2) TO ENCUMBER ITS REAL
13 PROPERTY AND PLANT AS SECURITY
14 FOR SUCH INDEBTEDNESS.

DOCKET NO. W-01427A-09-0120

10 **REBUTTAL TESTIMONY**

11 **OF**

12 **BRIAN MCBRIDE**

13 **(Phase One – Determination of Rate Base and Rates)**

14 **December 2, 2009**

1 **I. INTRODUCTION AND QUALIFICATIONS**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Brian McBride. My business address is 6100 W. Gila Springs Place,
4 Suite 7, Chandler, AZ 85226.

5 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

6 A. I am providing this rebuttal testimony on behalf of Litchfield Park Service
7 Company ("LPSCO" or "Company").

8 **Q. WHO IS YOUR CURRENT EMPLOYER AND WHAT DO YOU DO?**

9 A. I am the co-owner and principal engineer for McBride Engineering Services.

10 **Q. WHAT ARE YOUR EDUCATIONAL BACKGROUND AND**
11 **PROFESSIONAL QUALIFICATIONS?**

12 A. I received a B.S. degree from Drexel University in 1990 in Commerce and
13 Engineering. I then received B.S. and M.S. degrees from Drexel University in
14 Civil Engineering (Environmental). I am a registered Civil Engineer in the state of
15 Arizona, and I have maintained that registration since 1999. From 1996-2000, I
16 worked for Greeley Hansen Engineers as an EIT and then project manager. From
17 2000-2003, I worked for Damon S. Williams Associates as a senior project
18 manager and associate. In August 2003, my wife and I started McBride
19 Engineering Solutions ("MES"), and I have been the principal engineer for MES
20 since 2003. I have over 13 years of professional experience as a civil engineer
21 specializing in wastewater and water engineering projects, including program and
22 project management, start up and commissioning assistance, detailed design and
23 engineering, construction services and engineering studies in the water and
24 wastewater fields. My experience includes design and management of water and
25 wastewater facilities, reservoirs, pump and lift stations, recharge sites, valve
26 stations, pipelines, and solids handling facilities. I have performed engineering and

1 design studies relating to treatment facility plants, feasibility studies,
2 facility/collection master plans, process alternative analyses, site location studies,
3 reuse system planning, residual impacts, influent design parameter studies, effluent
4 disposal alternatives and bio solids handling alternatives.

5 **Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY BEFORE THE**
6 **ARIZONA CORPORATION COMMISSION?**

7 A. No, this is the first time I have submitted testimony in a case before the
8 Corporation Commission.

9 **II. SUMMARY OF TESTIMONY**

10 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

11 A. In my testimony, I respond to the direct testimony of Matt Rowell submitted by
12 RUCO relating to alleged design errors at the Palm Valley Water Reclamation
13 Facility ("PVWRF"). Specifically, I have reviewed pages 1-5 of Mr. Rowell's
14 direct testimony relating to alleged design errors in the PVWRF as originally
15 constructed and engineered in 2001-2002. In my rebuttal testimony, I address
16 Mr. Rowell's unsupported conclusions that there were design errors in the plant as
17 engineered and constructed in 2001-2002. My testimony focuses on my area of
18 expertise relating to civil engineering.

19 **III. TESTIMONY**

20 **Q. PLEASE EXPLAIN.**

21 A. On page 4 of his testimony, Mr. Rowell states: "LPSCO indicates that a large
22 investment in plant was necessary to remedy deficiencies at the PVWRF."
23 Mr. Rowell then references excerpts from Greg Sorensen's direct testimony and the
24 "Litchfield Park Service Company Water Reclamation Facilities Strategic Planning
25 Evaluation Report" prepared by MES relating to the PVWRF. Based on his
26 reading of those documents, Mr. Rowell testifies that there were "several design

1 problems at the PVWRF that resulted in excessive odors, insufficient reliability and
2 lack of redundancy capability." Mr. Rowell then goes on to conclude that "the
3 information provided by LPSCO indicates that there were significant design
4 problems at the PVWRF. Correcting these problems necessitated significant
5 upgrades."

6 **Q. DO YOU AGREE WITH MR. ROWELL'S TESTIMONY?**

7 A. Not at all. To start, Mr. Rowell is not a registered engineer, licensed contractor or
8 certified operator of a wastewater treatment plant. As such, he is not qualified to
9 render any opinions, let alone professional opinions, relating to supposed design
10 problems at the PVWRF. I also would note that Mr. Rowell has not undertaken the
11 necessary professional analysis of the design issues, such as reviewing the original
12 design plans and report prepared by Pacific Advanced Civil Engineering
13 ("PACE"), reviewing the applicable regulatory requirements, engineering
14 standards and construction codes applicable to the plant and discussing any
15 operational issues regarding the facility. All Mr. Rowell has done is read limited
16 portions of Mr. Sorensen's direct testimony and excerpts from our draft
17 engineering report.

18 **Q. IN YOUR PROFESSIONAL OPINION, WERE THERE ANY DESIGN**
19 **ERRORS WITH THE ORIGINAL PALM VALLEY WATER**
20 **RECLAMATION FACILITY AS DESIGNED AND CONSTRUCTED IN**
21 **2001-2002?**

22 A. No. As originally designed and constructed, the PVWRF met applicable
23 engineering and regulatory standards, regulations and approval requirements. In
24 fact, the plant engineering and construction were reviewed, analyzed and approved
25 by the Maricopa County Environmental Services Department ("MCESD") and
26 Arizona Department of Environmental Quality ("ADEQ"). The plant was

1 engineered by Pace Advanced Civil Engineering. I have reviewed PACE's Phase I
2 Design Report dated October 2001, and the plant was designed in accordance with
3 the MAG Uniform Details and Standard Specifications for Public Works
4 Construction (1998), the City of Goodyear Engineering Standards and Policy
5 Manual, ADEQ Engineering Bulletin 11 (1978) and applicable building codes. As
6 originally engineered and constructed, the PVWRF met applicable engineering
7 requirements and I am not aware of any errors as alleged by Mr. Rowell, an
8 economist.

9 **Q. WHAT WAS YOUR INVOLVEMENT RELATING TO THE 2007/2008**
10 **UPGRADES INSTALLED AT THE PVWRF?**

11 A. Liberty Water and LPSCO retained MES to evaluate operational challenges at the
12 PVWRF that had occurred after commissioning in 2002. LPSCO retained MES to
13 engineer certain upgrades and improvements to the plant in order to optimize
14 operations and wastewater service to customers. The PVWRF is a 4.1 mgd
15 wastewater treatment plant that produces high quality effluent water (Class A+).
16 We also were hired to conduct a study of the existing facilities at the PVWRF and
17 to recommend strategic options for optimizing treatment, operations, reliability and
18 redundancy capabilities for the plant. In turn, we reviewed the design documents,
19 process capacity studies, operations information, and we conducted interviews with
20 LPSCO's engineers and operations staff, and we consulted manufacturers and
21 process equipment experts. MES provided the LPSCO Water Reclamation
22 Facilities Strategic Planning Evaluation Report, which described the operational
23 challenges at the plant and showed target areas for improvements and upgrades to
24 the plant.

1 Q. IN HIS TESTIMONY, MR. ROWELL SUGGESTS THAT YOUR
2 EVALUATION REPORT DEMONSTRATES DESIGN ERRORS IN THE
3 PVWRF AS ORIGINALLY CONSTRUCTED. DO YOU AGREE?

4 A. No, Mr. Rowell mischaracterizes the Evaluation Report. That report focuses on
5 operational challenges with the plant and necessary upgrades to the plant to
6 optimize plant operations, treatment, reliability and service. We did not state that
7 there were any design errors in the PVWRF as originally engineered and built in
8 2001-2002. As I noted above, the plant as originally engineered in 2001-2002 met
9 applicable engineering and regulatory requirements.

10 Q. WERE THE 2007/2008 UPGRADES TO THE PVWRF CAUSED BY
11 DESIGN ERRORS IN THE ORIGINAL PLANT?

12 A. No. Those 2007/2008 upgrades increased the plant's reliability and redundancy
13 capabilities in order to optimize plant operations and service. Essentially, they
14 were additions to the plant, not fixes. Specifically, in 2007 and 2008, LPSCO
15 made various improvements to the PVWRF, including converting an existing
16 aerobic digestion tank to a third SBR tank, converting the anoxic tanks to an
17 equalization basin, improving influent screening, adding a surge tank return line,
18 installing improved UV disinfection equipment, adding a dewatering centrifuge,
19 and adding a new odor control system to the plant. Those 2007/2008 upgrades
20 resolved various operational challenges with the plant that had arisen since
21 commissioning in 2002. This type of situation is not unusual.

22 Often, a wastewater treatment plant will be constructed in accordance with
23 approved and appropriate engineering plans, but the plant will face operational
24 challenges as the facility is operated over several years. I commend LPSCO for
25 investing in upgrades and additions to correct operational challenges at the facility
26 and provide a better solution for utility customers.

1 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

2 A. Yes, although I do wish to note that I was engaged by LPSCO to address one
3 specific issue in this case; my silence on any other plant or engineering issue does
4 not necessarily suggest my agreement. Instead, I just have not evaluated any issues
5 beyond those I was specifically retained to address.

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6 **BEFORE THE ARIZONA CORPORATION COMMISSION**

7 IN THE MATTER OF THE APPLICATION
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8 COMPANY, AN ARIZONA
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DOCKET NO: SW-01428A-09-0103

12 IN THE MATTER OF THE APPLICATION
13 OF LITCHFIELD PARK SERVICE
COMPANY, AN ARIZONA
14 CORPORATION, FOR A
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15 OF ITS UTILITY PLANTS AND
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16 ITS WATER RATES AND CHARGES FOR
UTILITY SERVICE BASED THEREON.

DOCKET NO: W-01427A-09-0104

17 IN THE MATTER OF THE APPLICATION
18 OF LITCHFIELD PARK SERVICE
COMPANY, AN ARIZONA
19 CORPORATION, FOR AUTHORITY (1)
TO ISSUE EVIDENCE OF
20 INDEBTEDNESS IN AN AMOUNT NOT
TO EXCEED \$1,755,000 IN
21 CONNECTION WITH (A) THE
CONSTRUCTION OF TWO RECHARGE
22 WELL INFRASTRUCTURE
IMPROVEMENTS AND (2) TO
23 ENCUMBER ITS REAL PROPERTY AND
24 PLANT AS SECURITY FOR SUCH
INDEBTEDNESS.

DOCKET NO. W-01427A-09-0116

1 IN THE MATTER OF THE APPLICATION
2 OF LITCHFIELD PARK SERVICE
3 COMPANY, AN ARIZONA
4 CORPORATION, FOR AUTHORITY
5 (1) TO ISSUE EVIDENCE OF
6 INDEBTEDNESS IN AN AMOUNT NOT
7 TO EXCEED \$1,170,000 IN
8 CONNECTION WITH (A) THE
9 CONSTRUCTION OF ONE 200 KW ROOF
10 MOUNTED SOLAR GENERATOR
11 INFRASTRUCTURE IMPROVEMENTS
12 AND (2) TO ENCUMBER ITS REAL
13 PROPERTY AND PLANT AS SECURITY
14 FOR SUCH INDEBTEDNESS.

DOCKET NO. W-01427A-09-0120

12 **REBUTTAL TESTIMONY**

13 **of**

14 **THOMAS J. BOURASSA**

15 **on**

16 **RATE BASE, INCOME STATEMENT AND RATE DESIGN**

17 **(Phase 1 – Determination of Rate Base and Rates)**

18 **December 2, 2009**

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1 **I. INTRODUCTION AND QUALIFICATIONS**

2 **Q. PLEASE STATE YOUR NAME AND ADDRESS.**

3 A. My name is Thomas J. Bourassa. My business address is 139 W. Wood Drive,
4 Phoenix, Arizona 85029.

5 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS CASE?**

6 A. On behalf of the applicant, Litchfield Park Service Company ("LPSCO" or the
7 "Company").

8 **Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THE**
9 **INSTANT CASE?**

10 A. Yes, my direct testimony was submitted in support of the initial application in this
11 docket. There were two volumes, one addressing rate base, income statement and
12 rate design, and the other addressing cost of capital.

13 **Q. WHAT IS THE PURPOSE OF THIS REBUTTAL TESTIMONY?**

14 A. I will provide rebuttal testimony in response to the direct filings by Staff and
15 RUCO. More specifically, this first volume of my rebuttal testimony relates to rate
16 base, income statement and rate design for LPSCO. I will also address the
17 testimony by the intervenors PebbleCreek Properties Limited Partnership
18 ("PebbleCreek") and the City of Litchfield Park ("CLP"). In a second, separate
19 volume of my rebuttal testimony, I will also present an update to the Company's
20 requested cost of capital as well as provide responses to Staff and RUCO on the
21 cost of capital and rate of return applied to the fair value rate base, and the
22 determination of operating income.

1 **II. SUMMARY OF LPSCO'S REBUTTAL POSITION**

2 **Q. WHAT ARE THE REVENUE INCREASES FOR THE WATER AND**
3 **WASTEWATER DIVISIONS THAT THE COMPANY IS PROPOSING IN**
4 **THIS REBUTTAL TESTIMONY?**

5 A. For the water division the Company is proposing a total revenue requirement of
6 \$13,637,738, which constitutes an increase in revenues of \$6,759,028, or 98.26%
7 over adjusted test year revenues. For the wastewater division, the Company is
8 proposing a total revenue requirement of \$11,132,993, which constitutes an
9 increase in revenues of \$4,776,618, or 75.15% over adjusted test year revenues.

10 **Q. HOW DO THESE COMPARE WITH THE COMPANY'S DIRECT**
11 **FILING?**

12 A. They are both lower. In the direct filing for the water division, the Company
13 requested a total revenue requirement of \$13,983,148, which required an increase
14 in revenues of \$7,508,146, or 115.96%. In the direct filing for the wastewater
15 division, the Company requested a total revenue requirement of \$11,347,975,
16 which required an increase in revenues of \$4,991,601, or 78.53%.

17 **Q. WHY IS THE REQUESTED REVENUE INCREASE LOWER IN LPSCO'S**
18 **REBUTTAL FILING FOR BOTH DIVISIONS?**

19 A. In its rebuttal filing, LPSCO has adopted a number of adjustments recommended
20 by Staff and/or RUCO, as well as proposed a number of adjustments of its own
21 based on known and measurable changes to the test year.

22 For the water division, the net result of these adjustments is: (1) the
23 Company's proposed operating expenses have increased by \$145,654, from
24 \$6,757,892 in the direct filing to \$6,903,546; and a net decrease of \$422,023 in
25 rate base from the direct filing of \$37,924,592 to \$37,502,569.

1 For the wastewater division, the net result of these adjustments is: (1) the
2 Company's proposed operating expenses have increased by \$12,838, from
3 \$6,192,596 in the direct filing to \$6,205,414; and a net decrease of \$262,019 in rate
4 base from the direct filing of \$28,296,903 to \$28,034,885.

5 In addition, the Company has reduced its recommended cost of equity from
6 12.5% in its direct filing to 12.0% in its rebuttal filing. This has resulted in a lower
7 requested weighted cost of capital from 11.41% in the Company's direct filing to
8 11.0% in its rebuttal filing.

9 **Q. PLEASE SUMMARIZE THE REASON FOR THE DECREASE IN THE**
10 **RATE BASES?**

11 A. For the water division, the Company has proposed a number of rebuttal
12 adjustments to rate base causing a net decrease in rate base. Included among these
13 proposed adjustments is an adjustment to increase plant-in-service to recognize the
14 actual cost of post test year plant, an adjustment to decrease plant-in-service
15 ("PIS") reflecting plant retirements that were not recorded at the end of the test
16 year (including related adjustments to advances-in-aid of construction ("AIAC")
17 and contributions-in-aid of construction ("CIAC")), an increase to PIS for
18 organizational costs approved in last decision, and an increase to PIS to recognize
19 expenses that the Company proposes be capitalized. The net decrease to PIS is
20 \$26,157, the net decrease AIAC is \$8,677, and the net decrease to CIAC is \$7,888.
21 The net rate base impact of these three adjustments is \$(9,562).

22 In addition to the above mentioned adjustments, the Company is proposing
23 an adjustment to accumulated depreciation for the PIS adjustments it recommends.
24 The net decrease to accumulated depreciation is \$78,672. The net rate base impact
25 is \$78,672.

1 The Company is also proposing to reclassify \$2,238,022 of AIAC to
2 Customer Meter Deposits (refundable meter and service line charges) and to
3 remove \$68,685 of security deposits from Customer meter deposits. The net rate
4 base impact of these two adjustments is \$68,685.

5 The Company is also proposing an increase to the water division's deferred
6 income taxes (DIT) of \$426,079 based on its proposed adjustments to PIS and
7 accumulated depreciation as well as to correct an error in its direct filing
8 computation. The net rate base impact of this adjustment is \$(426,079).

9 Finally, the Company is proposing to reduce debt issuance costs from
10 \$134,528 to zero. The net rate base impact of this adjustment is \$(134,528).

11 For the wastewater division, the Company has also proposed a number of
12 rebuttal adjustments to rate base, again leading to a net decrease. Included among
13 these proposed adjustments is an adjustment to decrease PIS reflecting plant
14 retirements that were not recorded at the end of the test year (including related
15 adjustments to AIAC and CIAC), an adjustment to decrease plant-in-service for
16 plant transferred to an affiliate, Black Mountain Sewer Company ("BMSC"), and
17 an increase to PIS to recognize expenses that the Company proposes be capitalized.
18 The net decrease to PIS is \$560,453 , the net decrease to AIAC is \$16,649, and the
19 net decrease to CIAC is \$93,346. The net rate base impact of these three
20 adjustments is \$450,458.

21 In addition to the above mentioned adjustments, the Company is proposing
22 an adjustment to accumulated depreciation for the PIS adjustments it recommends.
23 The net decrease to accumulated depreciation is \$573,316. The net rate base
24 impact is \$573,316.

1 Q. ANYTHING ELSE, MR. BOURASSA?

2 A. Yes, the Company is also proposing an increase to the wastewater division's
3 deferred income taxes (DIT) of \$319,033 based on its proposed adjustments to PIS
4 and accumulated depreciation as well as to correct an error in its direct filing
5 computation. The net rate base impact of this adjustment is \$(319,033)

6 Finally, the Company is proposing to reduce debt issuance costs from
7 \$134,528 to zero. The net rate base impact of this adjustment is \$(134,528).

8 Q. WHAT ARE THE PROPOSED REVENUE REQUIREMENTS AND RATE
9 INCREASES FOR THE COMPANY, STAFF, AND RUCO AT THIS STAGE
10 OF THE PROCEEDING?

11 A. For the water division, the proposed revenue requirements and proposed rate
12 increases are as follows:

	<u>Revenue Requirement</u>	<u>Revenue Incr.</u>	<u>% Increase</u>
13 Company-Direct	\$13,983,148	\$7,508,146	115.96%
14 Staff	\$11,803,750	\$5,328,747	81.82%
15 RUCO	\$10,923,684	\$4,044,974	58.80%
16 Company Rebuttal	\$13,637,738	\$6,759,028	98.26%

17 For the wastewater division, the proposed revenue requirements and
18 proposed rate increases are as follows:

	<u>Revenue Requirement</u>	<u>Revenue Incr.</u>	<u>% Increase</u>
19 Company-Direct	\$11,347,975	\$4,991,601	78.53%
20 Staff	\$9,197,992	\$2,841,618	44.71%
21 RUCO	\$8,169,592	\$1,810,405	28.47%
22 Company Rebuttal	\$11,132,993	\$4,776,618	75.15%

1 **III. RATE BASE**

2 **A. Water Division Rate Base**

3 **Q. WOULD YOU PLEASE IDENTIFY THE PARTIES' RESPECTIVE RATE**
4 **BASE RECOMMENDATIONS FOR THE WATER DIVISION?**

5 A. Yes, for the water division the rate bases proposed by the parties proposing a rate
6 base in the case, the Company, Staff and RUCO, are as follows:

	<u>OCRB</u>	<u>FVRB</u>
Company-Direct	\$37,924,592	\$37,924,245
Staff	\$37,218,182	\$37,218,182
RUCO	\$37,222,878	\$37,222,878
Company Rebuttal	\$37,502,569	\$37,502,569

12 None of the other parties has made a specific proposal regarding rate base,
13 revenues or expenses.

14 **1. Plant-in-Service.**

15 **Q. WOULD YOU PLEASE DISCUSS THE COMPANY'S PROPOSED**
16 **ORIGINAL COST RATE BASE FOR THE WATER DIVISION, AND**
17 **IDENTIFY ANY ADJUSTMENTS YOU HAVE ACCEPTED FROM STAFF**
18 **AND/OR RUCO?**

19 A. The Company's rebuttal rate base adjustments to the water division's OCRB are
20 detailed on rebuttal schedules B-2, pages 3 through 6. Rebuttal Schedule B-2, page
21 1 and 2, summarize the Company's proposed adjustments and the rebuttal OCRB.

22 Rebuttal B-2 adjustment 1, as summarized on Rebuttal Schedule B-2, page
23 2, consists of three adjustments labeled as "A", "B", "C", "D" and "E" on Rebuttal
24 Schedule B-2, page 3.

25 Adjustment A reflects an increase to PIS for post test year plant totaling
26 \$18,805. This plant is for the new arsenic treatment facilities. Staff has made

1 similar adjustments.¹ RUCO has not made a similar adjustment. However, all the
2 parties include post test year arsenic treatment plant costs in rate base.

3 **Q. PLEASE CONTINUE.**

4 A. Adjustment B, of rebuttal B-2 adjustment 1, reflects a decrease to PIS of \$78,879
5 to remove the costs of the Litchfield Greens Booster Station. This booster station
6 has not been in service since 2003. Both Staff and RUCO propose similar
7 adjustments to PIS², however, the Company and RUCO treat the removal of the
8 booster station as a retirement whereas Staff does not.³ I will address this later in
9 my testimony in my discussion of the Company proposed accumulated
10 depreciation adjustments.

11 Adjustment C, of rebuttal B-2 adjustment 1, reflects an increase to PIS of
12 \$19,989 for capitalized expenses. This adjustment reflects an adoption of certain
13 RUCO proposed PIS adjustments for capitalized expenses plus additional amounts.
14 Staff has not proposed any adjustments to PIS for capitalized expenses.

15 **Q. WHAT IS THE DIFFERENCE BETWEEN RUCO AND THE COMPANY**
16 **FOR CAPITALIZED EXPENSES?**

17 A. RUCO proposes to capitalize \$9,714 of expenses.⁴ The detail of RUCO's
18 capitalized expense can be found in RUCO's operating income adjustment number
19 4a.⁵ The Company agrees with RUCO to capitalize amounts related to clocks for
20 well site of \$1,114 and a distribution system evaluation of \$8,600. Additionally,
21 however, the Company proposes to capitalize a well spacing evaluation of \$1,380,
22

23 ¹ See Direct Testimony of Jeffrey M. Michlik for Water Division ("Michlik W Dt.") at 7-8.

24 ² See RUCO Water Schedule 3, page 2 of 4, Adjustment Number 2; Michlik W Dt. at 8-9.

25 ³ *Id.*

26 ⁴ See RUCO Water Schedule 3, page 4 of 4, Adjustment Number 23.

⁵ See RUCO Water Schedule 4, page 5 of 15, Adjustment Number 4a.

1 well rehabilitation costs of \$4,072, and a well impact analysis of \$4,823. These
2 three additional amounts RUCO proposes to be removed from test year operating
3 expenses as non-recurring expense, but not capitalized. The Company believes
4 these costs are legitimately capital related as they reflect expenditures which have a
5 benefit (useful life) of more than one year.

6 **Q. PLEASE CONTINUE.**

7 A. Adjustment D, of rebuttal B-2 adjustment 1, reflects the removal of \$7,072 of
8 2002 office rent included in plant in service. This cost was identified by RUCO in
9 RUCO Schedule 3, page 3 of 4 (Adjustment 16). I have examined the underlying
10 documentation and agree with RUCO on the removal of office rent from plant-in-
11 service.

12 Adjustment E, of rebuttal B-2 adjustment 1, reflects an increase to PIS of
13 \$21,000 for organization cost approved in the last decision. This adjustment
14 reflects an adoption of RUCO proposed PIS adjustment.⁶ Staff has not proposed
15 any adjustment to PIS for organizational costs.

16 **2. Accumulated Depreciation.**

17 **Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO ACCUMULATED**
18 **DEPRECIATION.**

19 A. Rebuttal B-2 adjustment 2, as summarized on Rebuttal Schedule B-2, page 2,
20 consists of three adjustments labeled as "A", "B", and "C" on Rebuttal Schedule B-
21 2, page 4.

22 Adjustment A reflects a decrease to accumulated depreciation for the
23 booster station retirement discussed earlier totaling \$78,879. RUCO makes a
24 similar adjustment.⁷ However, because Staff does not treat the removal of the

25 ⁶ See Direct Testimony of Sonn S. Rowell ("S Rowell Dt.") at 6.

26 ⁷ See RUCO Water Schedule 2, page 2 of 4. Line 19 reflects a previously recorded retirement of \$6,100

1 booster station as a retirement, Staff only removes \$35,223 of related accumulated
2 depreciation rather than the entire original cost of \$78,879 as would be required
3 with a retirement of plant.⁸ In other words, Staff's adjustment is not rate base
4 neutral, like the adjustments made by the Company and RUCO.

5 Adjustment B, of rebuttal B-2 adjustment 2, reflects an increase to
6 accumulated depreciation of \$207 for depreciation related to test year capitalized
7 expenses (half-year convention).

8 Adjustment C, of rebuttal B-2 adjustment 2, reflects a decrease to
9 accumulated depreciation related to the office rent costs removed from PIS as
10 discussed earlier.

11 Adjustment D, of rebuttal B-2 adjustment 2, reflects a correction for
12 accumulated depreciation amounts for the various plant accounts. In its direct
13 filing, the Company inadvertently included accumulated depreciation of account
14 303 – Land and Land Rights totaling \$12,145. This amount has been removed and
15 properly distributed over the depreciable plant accounts. The net adjustment to
16 accumulated depreciation is zero.

17 **3. Deferred Income Taxes (DIT)**

18 **Q. HAS THE COMPANY PROPOSED A REBUTTAL ADJUSTMENT TO**
19 **DEFERRED INCOME TAXES FOR THE WATER DIVISION?**

20 **A.** Yes. In rebuttal B-2 adjustment 3, as shown on Schedule B-2, page 2, the
21 Company's deferred income tax liability is increased by \$426,709 to \$448,160.
22 The increase reflects the Company's rebuttal proposed changes to PIS,
23

24
25 plus the \$78,879 for the booster station. The total accumulated depreciation reduction as shown is \$84,979
(\$6,100 plus \$78,979).

26 ⁸ Michlik W Dt. at 9.

1 accumulated depreciation, AIAC and CIAC. The details of the Company's rebuttal
2 proposed DIT adjustment is shown on Schedule B-2, page 5.

3 **Q. HAVE YOU UPDATED THE APPROACH TO ESTIMATING THE TAX**
4 **VALUE OF ASSETS AT THE END OF THE TEST YEAR?**

5 A. Yes. In its direct filing, the Company rolled forward the tax value at December 31,
6 2007 to September 30, 2008 (the end of the test year). This is a perfectly
7 acceptable approach and should result in similar DIT. As an alternative, the tax
8 value at December 31, 2008 can be rolled backward to September 30, 2008. The
9 Company has chosen use the "roll backward" approach to help eliminate any
10 disputes with Staff regarding the computation of DIT, such as occurred in the
11 recent BMSC rate case.⁹

12 **Q. COULD THE COMPANY HAVE USED THE "ROLL BACKWARD"**
13 **APPROACH TO COMPUTING THE TAX VALUE OF ASSETS IN ITS**
14 **DIRECT FILING?**

15 A. No. The 2008 tax return information was not available because the parent
16 company's consolidated returns had not been finalized at the time of the
17 Company's direct filing.

18 **Q. WHAT IS THE PRIMARY REASON FOR THE INCREASE IN THE**
19 **DEFERRED INCOME TAXES?**

20 A. Recognition of the reclassification of AIAC to Customer Meter Deposits (meter
21 and service installation charges) which are excluded from the AIAC component of
22 the DIT computation. While technically Customer Meter Deposits are AIAC,
23 depreciation is recognized for both book and tax purposes for these amounts
24 because these charges are treated as revenue for tax purposes providing a tax basis

25 ⁹ Transcript from June 25, 2009 hearing at 743:7-744:11; 745:10-15; 749:24-750:17, *Black Mountain*
26 *Sewer Corporation*, Docket No. SW-02361A-08-0609.

1 in the assets these charges fund. As I have explained in other testimony¹⁰,
2 Customer Meter Deposits should be excluded from the AIAC component in the
3 DIT computation for this reason. In the direct filing, I mistakenly assumed that the
4 Company's Security Deposits were Customer Meter Deposits. Had I not made this
5 error in the direct filing, the DIT proposed in direct would have been similar to the
6 DIT the Company now proposes in its rebuttal filing.

7 **Q. HAVE STAFF OR RUCO PROPOSED CHANGES TO THE COMPANY'S**
8 **DEFERRED INCOME TAXES?**

9 A. Staff has proposed the test year unadjusted DIT of \$335,487. Mr. Michlik testifies
10 that the DIT is not known and measurable.¹¹ However, based on Staff testimony in
11 the pending BMSC rate case, where Staff accepted my methodology, I believe that
12 Staff can agree that the Company's DIT approach is correct, even if they disagree
13 with the amount because our numbers do vary.¹²

14 **4. Advances-in-Aid of Construction (AIAC) and Contributions-in-**
15 **Aid of Construction (CIAC).**

16 **Q. PLEASE DISCUSS THE COMPANY'S ADJUSTMENT TO ADVANCES-IN-**
17 **AID OF CONSTRUCTION AND CONTRIBUTIONS-IN-AID OF**
18 **CONSTRUCTION?**

19 A. In rebuttal B-2 adjustment 4, as shown on Schedule B-2, page 2, the Company
20 proposes a decrease to AIAC of \$8,677 and a decrease to CIAC of \$7,888. These
21 adjustments correspond to the proposed PIS retirement adjustment of \$78,879 for
22 the booster station I discussed previously. Staff proposes similar decreases to
23

24 ¹⁰ See Rejoinder Testimony of Thomas J. Bourassa in Docket No. SW-02361A-08-0609 at 9-10.

25 ¹¹ Michlik W Dt. at 11.

26 ¹² Transcript from June 25, 2009 hearing at 702:3-7;739: 739:21-740:7, *Black Mountain Sewer Corporation*, Docket No. SW-02361A-08-0609.

1 AIAC and CIAC. However, RUCO does not. RUCO has not explained why it
2 does not reduce AIAC and CIAC for the plant it agrees to retire.

3 **5. Reclassification of Advances-in-Aid of Construction (AIAC) to**
4 **Customer Meter Deposits.**

5 **Q. PLEASE DISCUSS THE COMPANY'S RECLASSIFICATION OF**
6 **ADVANCES-IN-AID OF CONSTRUCTION TO CUSTOMER METER**
7 **DEPOSITS?**

8 A. In rebuttal B-2 adjustment 5, as shown on Schedule B-2, page 2, the Company
9 proposes a decrease to AIAC of \$2,238,022 and an increase to Customer Meter
10 Deposits of \$2,238,022. As I discussed earlier, Customer Meter Deposits are
11 technically AIAC, but I have typically shown refundable meter and service line
12 charges as a separate component of rate base under the description "Customer
13 Meter Deposits". By doing so, the DIT computation is easier to follow and
14 compute off of the amounts shown in rate base.

15 **6. Removal of Security Deposits.**

16 **Q. PLEASE DISCUSS THE COMPANY'S ADJUSTMENT TO CUSTOMER**
17 **METER DEPOSITS FOR REMOVAL OF SECURITY DEPOSITS?**

18 A. In rebuttal B-2 adjustment 6, as shown on Schedule B-2, page 2, the Company
19 proposes a decrease to Customer Meter Deposits of \$68,685. This amount is for
20 Security Deposits and as I explained earlier, it was an error on my part to include
21 these amounts in rate base because I mistakenly thought these were Customer
22 Meter Deposits. However, Security Deposits are not a rate base component.¹³
23 They are sometimes, and when appropriate, a component of working capital, but
24 since the Company is not proposing working capital they do not belong in rate
25 base.

26 ¹³ See R-14-2-103, Appendix B Rate Base Schedules.

1 **Q. DOES STAFF PROPOSE SECURITY DEPOSITS IN RATE BASE?**

2 A. Yes.¹⁴ In fact, Staff proposes to increase Customer Meter Deposits from \$68,685
3 to 235,683.¹⁵ Again, these are Security deposits, not customer meter deposits
4 which are not included in rate base. RUCO has not proposed a change to Customer
5 Meter Deposits as originally proposed by the Company.

6 **7. Debt Issuance Costs.**

7 **Q. PLEASE DISCUSS THE COMPANY'S ADJUSTMENT TO DEBT**
8 **ISSUANCE COSTS?**

9 A. In rebuttal B-2 adjustment 7, as shown on Schedule B-2, page 2, the Company
10 proposes a remove debt issuance costs from rate base. While the Company
11 believes that debt issuance costs should either be included in rate base or the costs
12 be reflected in the cost of debt, the Company is removing the costs to help
13 eliminate disputes between the parties. Staff and the Company are now in
14 agreement to exclude debt issuance cost from rate base.

15 **8. Remaining Rate Bases Issues.**

16 **Q. PLEASE DISCUSS THE REMAINING RATE BASE ISSUES BETWEEN**
17 **THE PARTIES.**

18 A. The Company does not agree with RUCO's proposed adjustments to PIS for
19 RUCO asserted unsupported capitalized affiliate labor, various invoices that could
20 not be found, and/or costs that were associated with repair work.¹⁶

21 **Q. LET'S START WITH CAPITALIZED AFFILIATE LABOR. PLEASE**
22 **DISCUSS THE ISSUES RUCO HAS WITH THE AFFILIATE LABOR**
23 **COSTS.**

24 ¹⁴ Michlik W Dt. at 10.

25 ¹⁵ *Id.*

26 ¹⁶ S Rowell Dt. at 6.

1 A. First, let me explain that the capitalized affiliate profit was included in capitalized
2 affiliate labor. The profit existed because the Company charged affiliate labor at
3 market rates.¹⁷ In any case, the Company removed the capitalized affiliate profit
4 from plant costs.¹⁸ What remains in the Company's plant costs is capitalized
5 affiliate labor at cost.

6 RUCO finds that the Company did not adequately support the capitalized
7 affiliate labor because RUCO found discrepancies in the amounts included in the
8 Company's B-2 water schedule and information contained in a response to RUCO
9 3.7. The apparent discrepancy is shown in Table 1 on page 20 of Ms. Rowell's
10 direct testimony. Table 1 summarizes the year-to-year capitalized affiliate profit
11 reflected on the Company's B-2 schedule and the information provided by the
12 Company in response to RUCO data request MJR 3.7¹⁹. Ms. Rowell admits that
13 there is not a large discrepancy in total amount of capitalized affiliate profit but still
14 takes issue with the year-to-year amounts. For example, the total capitalized
15 affiliate profit reflected in the Company's B-2 water schedules totals \$279,398 and
16 the total capitalized labor contained in the information provided in response to
17 MJR 3.7 totals \$284,008 - a difference of \$9,221 or 3.3%. But, as explained by the
18 Company in response to RUCO data request 3.6, the capitalized labor is first
19 recorded to construction work-in-progress ("CWIP") and later transfer to PIS when
20 the project is placed into service. So, the year-to-year difference will exist when
21 the labor cost is first capitalized and when labor cost actually is reflected in PIS.

22
23
24 ¹⁷ See Company Rebuttal B-2 water schedule, pages 3.5 to 3.14.

25 ¹⁸ The Company's current practice is to charge capitalized labor at cost.

26 ¹⁹ Those data request responses referenced herein are voluminous, and for this reason are not attached, however, copies were provided to Staff, RUCO, and the other intervenors who requested them.

1 RUCO also finds the capitalized affiliate labor information to be inadequate
2 because the invoices provided in response to Staff data requests 1.52 and 1.77 for
3 affiliate labor contained almost no relevant information.²⁰ However, the detail of
4 the capitalized labor was provided to all of the parties as part of the Company's
5 work papers.²¹ This work paper file contained the name of the NARUC account,
6 the project name, the date, the labor rate, payroll burden, the total cost, and the
7 related affiliate profit.

8 **Q. WHAT ABOUT COSTS FOR VARIOUS INVOICES THAT COULD NOT**
9 **BE FOUND OR WERE FOR REPAIR WORK?**

10 A. According to the notes on RUCO Water Schedule 3, pages 2, 3, and 4, for
11 unsupported costs it appears that RUCO disallows a \$19,000 cost from Yahweh
12 Contracting (2001), three costs from Hughes Supply (2002) for \$5,081, \$4,931, and
13 \$4,931, a cost from Courtesy Chevrolet (2002) for \$14,919, and a cost from W.
14 Fischer (2002) for \$2,750. The balance of the notes on RUCO Schedule 3 appear
15 to indicate that other plant costs RUCO proposes to disallow are related to repairs
16 that RUCO believes should not be capitalized.

17 **Q. LET'S START WITH THE ASSERTED UNSUPPORTED AMOUNTS**
18 **FROM YAHWEH CONTRACTING AND HUGHES SUPPLY. DO YOU**
19 **HAVE A COMMENT?**

20 A. Yes. For the \$19,000 cost from Yahweh Contracting, I have examined the
21 information contained in response to data request JMM 1.52 and have located the
22 invoices supporting this amount. I have included copies of these invoices at **TBJ-**
23 **RB1 (Rate Base – Phase I)**, attached hereto. For the costs from Hughes Supply, I

24 ²⁰ S Rowell Dt. at 18.

25 ²¹ Work paper file "LPSCO CAP Profit from Acquisition to Sept 30 2008.xls." (This work paper file (and
26 any others cited herein) is voluminous and therefore is not attached, however, it was provided to Staff,
RUCO, and the other intervenors who requested work papers.)

1 found one invoice, not three separate invoices, contained in the response to JMM
2 1.52 which supports the cost of \$14,943 (\$5,081 plus \$4,931 plus \$4,931).

3 **Q. WHY WERE THERE THREE ENTRIES IN THE PLANT LEDGER BUT**
4 **ONLY ONE INVOICE?**

5 A. Frankly, I don't know and it doesn't matter. The bottom line is that the three plant
6 ledger entries reference the same Hughes Supply invoice number (868500) as
7 \$14,943 invoice. There is no question that this is the invoice supporting the three
8 ledger entries.²²

9 **Q. WHAT ABOUT THE COST FROM COURTESY CHEVROLET?**

10 A. For the \$14,919 cost from Courtesy Chevrolet, I found an invoice contained in
11 response to JMM 1.52 which supports a cost of \$15,225. This is the only 2002
12 invoice from Courtesy Chevrolet for transportation equipment in 2002. The lead
13 sheet (Excel file) reports a cost of \$15,225.²³

14 **Q. DOES RUCO HAVE A JUSTIFIABLE BASIS TO DISALLOW THESE**
15 **COSTS?**

16 A. No.

17 **Q. WHAT ABOUT THE INVOICE FROM W. FISCHER FOR \$2,750?**

18 A. The Company identified this invoice as a missing invoice in its response to JMM
19 1.52. However, the Company believes that this cost should be allowed. JMM 1.52
20 requested plant documentation on nearly \$61 million of plant going back to 2001.
21 Given the breadth of the request and the length of time, I am impressed by the
22 ability of the Company to provide nearly every invoice. As an auditor, I would not
23 find the \$2,750 suspect. The ledger records contain enough information to
24

25 ²² A copy of the invoice is included in TJB-RB1 (Rate Base – Phase I), attached hereto.

26 ²³ A copy of the invoice is included in TJB-RB1 (Rate Base – Phase I), attached hereto.

1 determine the nature of the cost (a forklift) as well as the vendor and other
2 information to determine its reasonableness.

3 **Q. PLEASE COMMENT ON CAPITALIZED REPAIR COSTS?**

4 A. The Company does not agree with RUCO that the repair costs RUCO proposes to
5 disallow should not have been capitalized.²⁴ Repairs that extend the life of
6 equipment and/or benefit the Company over more than one year should be
7 capitalized. This is a generally accepted accounting principle. I have examined a
8 number of the repair invoices and find that the Company was justified in
9 capitalizing these repair costs. RUCO has not provided any reasons other than that
10 these costs related to repairs as the basis for their recommended disallowance. This
11 is not sufficient justification to disallow the capitalization of cost.

12 **Q. LET'S MOVE ON. PLEASE DISCUSS THE DEFERRED REGULATORY**
13 **ASSETS THE COMPANY PROPOSES TO INCLUDE IN RATE BASE.**

14 A. Staff proposes to exclude the Company proposed deferred regulatory assets from
15 rate base.²⁵ As you will recall, there are deferred costs related to potential
16 contamination of the Company's wells. The Company obtained an Accounting
17 Order (Decision 69912 (September 27, 2007)) specifically allowing these cost to be
18 deferred and considered in the Company next rate case. Staff is recommending
19 disallowance because the Company has not yet taken any legal steps to recover
20 these costs.²⁶ However, the Company has taken action as contemplated in the
21 Accounting Order and believes that it is appropriate to begin recovery of the costs
22 incurred through the end of the test year.²⁷ Further, the Company will continue to

23
24 ²⁴ S Rowell Dt. at 6.

25 ²⁵ Michlik W Dt. at 14.

26 ²⁶ *Id.*

27 ²⁷ Rebuttal Testimony of Greg Sorensen (Phase I) ("Sorensen Rb.") at 11-12.

1 track future costs related to this issue and seek recovery in future rate case. Mr.
2 Sorenson discusses this issue in more detail in his rebuttal testimony.

3 RUCO is proposing to include the deferred regulatory costs in rate base.²⁸
4 However, RUCO reduces the deferred regulatory asset by \$8,256 which RUCO
5 believes is double counted.²⁹ The \$8,256 is one year of amortization that is
6 included in the Company's proposed operating expenses.

7 **Q. HOW IS THE \$8,256 DOUBLE COUNTED?**

8 A. It's not. The \$8,256 the Company proposes to be included in operating expenses
9 for purposes of determining the revenue requirement will not be reflected in rates
10 until new rates are approved. Accordingly, the deferred regulatory cost should not
11 be reduced. Conceptually, it is the same as annualized depreciation. All of the
12 parties reflect a full year of depreciation (annualized depreciation) in their
13 respective proposed operating expenses. The annualized depreciation will be the
14 depreciation expense reflected in new rates when a decision is rendered in the
15 instant case just as the \$8,256 of amortization. The annualized depreciation is
16 higher than the test year actual depreciation because plant additions during the test
17 year received only a half year of depreciation. But, none of the parties propose to
18 increase accumulated depreciation in rate base for the annualized amount of
19 depreciation over and above the actual test year accumulated depreciation. By
20 reducing the deferred regulatory assets by one year of amortization because the
21 Company proposes to include amortization in rates is inconsistent with generally
22 accepted rate making principles.

23
24
25 ²⁸ S Rowell Dt. at 5.

26 ²⁹ *Id.*

1 **B. Wastewater Division Rate Base**

2 **Q. WOULD YOU PLEASE IDENTIFY THE PARTIES' RESPECTIVE**
3 **WASTEWATER RATE BASE RECOMMENDATIONS?**

4 **A. Yes, for the Water Division the rate bases proposed by the parties proposing a rate**
5 **base in the case, the Company, Staff and RUCO, are as follows:**

	<u>OCRB</u>	<u>FVRB</u>
Company-Direct	\$28,296,903	\$28,296,903
Staff	\$27,472,314	\$27,472,314
RUCO	\$21,248,950	\$21,248,950
Company Rebuttal	\$28,034,855	\$28,034,855

11 Again, the other parties have not made specific proposals for rate base.

12 **1. Plant-in-Service.**

13 **Q. WOULD YOU PLEASE DISCUSS THE COMPANY'S PROPOSED**
14 **ORIGINAL COST RATE BASE FOR THE WASTEWATER DIVISION,**
15 **AND IDENTIFY ANY ADJUSTMENTS YOU HAVE ACCEPTED FROM**
16 **STAFF AND/OR RUCO?**

17 **A. The Company's rebuttal rate base adjustments to the wastewater division's OCRB**
18 **are detailed on rebuttal schedules B-2, pages 3 through 6. Rebuttal Schedule B-2,**
19 **page 1 and 2, summarize the Company's proposed adjustments and the rebuttal**
20 **OCRB.**

21 Rebuttal B-2 adjustment 1, as summarized on Rebuttal Schedule B-2, page
22 2, consists of three adjustments labeled as "A", "B", and "C" on Rebuttal Schedule
23 B-2, page 3. Adjustment A, of rebuttal B-2 adjustment 1, reflects a decrease to PIS
24 of \$554,977 to remove the costs of the Wigwam Lift Station, the Bullard Lift
25 Station, and the Litchfield Greens Lift Station. The Wigwam Lift Station, the
26 Bullard Lift Station, we taken out of service in 2002 and the Litchfield Greens Lift

1 Station was taken out of service in 2007. Both Staff and RUCO propose similar
2 adjustments to PIS.³⁰ Again, though, LPSCO and RUCO treat the removal of the
3 lift stations as retirements.³¹

4 Adjustment B, of rebuttal B-2 adjustment 1, reflects a decrease to PIS of
5 \$38,250 for an odor control unit transfer to Black Mountain Sewer Company
6 ("BMSC"). Staff and RUCO propose a similar adjustment except that the amount
7 they propose is \$38,625.³² The Company has provided the parties with further
8 documentation that supports the Company's amount.³³

9 Adjustment C, of rebuttal B-2 adjustment 1, reflects an increase to PIS of
10 \$25,702 for capitalized expenses. This adjustment reflects an adoption of certain
11 RUCO proposed PIS adjustments for capitalized expenses plus additional amounts.
12 Staff has not proposed any adjustments to PIS for capitalized expenses.

13 **Q. WHAT IS THE DIFFERENCE BETWEEN RUCO AND THE COMPANY**
14 **FOR CAPITALIZED EXPENSES?**

15 A. RUCO proposes to capitalize \$17,124 of expenses.³⁴ The detail of RUCO's
16 capitalized expense can be found in RUCO's operating income adjustment number
17 4a.³⁵ The Company agrees with RUCO to capitalize amounts related to generator
18 duct fabrication and installation of \$5,004, installation of a rebuilt pump of \$1,530,
19 the cost of new reinforced strainer baskets of \$4,864, the cost of a fence and

20 ³⁰ See RUCO Wastewater Schedule 3, page 2 of 4, Adjustment Number 3 and 4 which totals \$544,977.
21 According to Staff the total is \$554,977. See Direct Testimony of Jeffery M. Michlik for Wastewater
22 Division ("Michlik WW Dt.") at 7.

23 ³¹ *Id.*

24 ³² See RUCO Wastewater Schedule 3, page 2 of 4, Adjustment Number 5; see Michlik WW Dt. at 8.

25 ³³ Information was provided to Staff and RUCO on November 27, 2009. The documentation is attached
26 hereto as **TJB-RB2 (Rate Base – Phase I)**. The final schedules in the BMSC rate case will reflect the
updated cost and related accumulated depreciation.

³⁴ See RUCO Wastewater Schedule 3, page 2 of 4, Adjustment Number 6 and 7.

³⁵ See RUCO Wastewater Schedule 4, page 5 of 15, Adjustment Number 4a.

1 installation of \$3,725, the cost of odor monitor site plant and pole of \$1,450, and
2 the cost of odor monitor legal description and map of \$550. Additionally,
3 however, the Company proposes to capitalize a filter system repair of \$8,054, and
4 the cost of work on a UV system of \$525. These two additional amounts RUCO
5 proposes to be removed from test year operating expenses as non-recurring
6 expense, but not capitalized. The Company believes these costs are legitimately
7 capital related as they reflect expenditures which have a benefit (useful life) of
8 more than one year.

9 **2. Accumulated Depreciation.**

10 **Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO ACCUMULATED**
11 **DEPRECIATION.**

12 **A.** Rebuttal B-2 adjustment 2, as summarized on Rebuttal Schedule B-2, page 2,
13 consists of three adjustments labeled as "A", "B", and "C" on Rebuttal Schedule B-
14 2, page 4.

15 Adjustment A reflects a decrease to accumulated depreciation for the lift
16 station retirements discussed earlier totaling \$554,977. RUCO makes a similar
17 adjustment although I believe RUCO's adjustment is incorrect.³⁶ However,
18 because Staff does not treat the removal of the lift stations as retirements, Staff
19 only removes \$182,696 of related accumulated depreciation rather than the entire
20 original cost of \$554,977 as would be required with a retirement of plant.³⁷ In this
21 fashion, Staff lowers rate base, as compared to LPSCO and RUCO's plant
22 retirements, which are rate base neutral.

23
24 ³⁶ See RUCO Wastewater Schedule 2, page 2 of 4. Line 19 reflects and 2002 adjustment of \$780,874, but
25 it should be \$790,874 consisting of a previously recorded 2002 retirement of \$332,823 plus \$458,051 for
the 2002 retirement of the Wigwam and Bullard lift stations. Also, the adjustment for the 2007 retirement
of the Litchfield Greens Lift Station totaling \$96,926 is missing.

26 ³⁷ Michlik WW Dt. at 9.

1 Adjustment B, of rebuttal B-2 adjustment 2, reflects a decrease to
2 accumulated depreciation of \$11,040 for depreciation related to the odor control
3 unit transfer to BMSC discussed earlier.

4 Adjustment C, of rebuttal B-2 adjustment 2, reflects a decrease to
5 accumulated depreciation of \$8,003 for cost related to the decommissioning
6 (removal of) the Litchfield Green Lift Station that was recorded in expense during
7 the test year. This is the proper regulatory treatment of these types of costs. As I
8 will discuss, I have removed this cost from test year expenses. RUCO identified
9 this cost as a non-recurring expense for the test year and also removed this cost
10 from operating expenses.³⁸ However, RUCO has not proposed an adjustment to
11 accumulated depreciation.

12 Adjustment D, of rebuttal B-2 adjustment 2, reflects an increase to
13 accumulated depreciation of \$705 for depreciation related to test year capitalized
14 expenses (half-year convention) as discussed previously.

15 **3. Deferred Income Taxes (DIT)**

16 **Q. HAS THE COMPANY PROPOSED A REBUTTAL ADJUSTMENT TO**
17 **DEFERRED INCOME TAXES FOR THE WASTEWATER DIVISION?**

18 **A.** Yes. In rebuttal B-2 adjustment 3, as shown on Schedule B-2, page 2, the
19 Company's deferred income tax liability is increased by \$319,033 to \$335,020.
20 The increase reflects the Company's rebuttal proposed changes to PIS,
21 accumulated depreciation, AIAC and CIAC. The details of the Company's rebuttal
22 proposed DIT adjustment is shown on Schedule B-2, page 5. As I explained
23 previously, the Company's DIT computation also reflects an updated tax value of
24
25

26 ³⁸ See RUCO Wastewater Schedule 4, page 5 of 19, Operating Income Adjustment 4a.

1 assets starting with 2008 tax information and a correction to the AIAC balance
2 contained in the computation.

3 **Q. HAS STAFF OR RUCO PROPOSED CHANGES TO THE COMPANY'S**
4 **DEFERRED INCOME TAXES FOR THE WASTEWATER DIVISION?**

5 A. As with the water division rate base, Staff has proposed the test year unadjusted
6 DIT of \$335,487 claiming that the DIT amount is not known and measurable.³⁹
7 Again, Staff just agreed with my methodology in the BMSC case and will
8 hopefully do so again in this case.

9 **4. Advances-in-Aid of Construction (AIAC) and Contributions-in-**
10 **Aid of Construction (CIAC).**

11 **Q. PLEASE DISCUSS THE COMPANY'S ADJUSTMENT TO ADVANCES-IN-**
12 **AID OF CONSTRUCTION AND CONTRIBUTIONS-IN-AID OF**
13 **CONSTRUCTION?**

14 A. In rebuttal B-2 adjustment 4, as shown on Schedule B-2, page 2, the Company
15 proposes a decrease to AIAC of \$16,649 and a decrease to CIAC of \$93,346.
16 These adjustments correspond to the proposed PIS retirement adjustment of
17 \$554,977 for the lift stations I discussed previously. Staff proposes similar
18 decreases to AIAC and CIAC. However, RUCO does not. RUCO has not
19 explained why it does not reduce AIAC and CIAC for the retired lift stations.

20 **5. Removal of Security Deposits.**

21 **Q. PLEASE DISCUSS THE COMPANY'S ADJUSTMENT TO CUSTOMER**
22 **METER DEPOSITS FOR REMOVAL OF SECURITY DEPOSITS.**

23 A. In rebuttal B-2 adjustment 6, as shown on Schedule B-2, page 2, the Company
24 proposes a decrease to Customer Meter Deposits of \$68,685. This amount is for
25

26 ³⁹ Michlik WW Dt. at 11.

1 Security Deposits, and as I explained earlier, it was an error on my part to include
2 these amounts in rate base because I mistakenly thought these were Customer
3 Meter Deposits.

4 **Q. DOES STAFF AND/OR RUCO PROPOSE SECURITY DEPOSITS IN RATE**
5 **BASE?**

6 A. Yes.⁴⁰ In fact, Staff proposes to increase Customer Meter Deposits from \$68,685
7 to 81,798.⁴¹ Again, these are Security deposits, not customer meter deposits which
8 are not included in rate base. RUCO has not proposed a change to Customer Meter
9 Deposits as originally proposed by the Company.

10 **6. Debt Issuance Costs.**

11 **Q. PLEASE DISCUSS THE COMPANY'S ADJUSTMENT TO DEBT**
12 **ISSUANCE COSTS.**

13 A. In rebuttal B-2 adjustment 7, as shown on Schedule B-2, page 2, the Company
14 proposes a remove debt issuance costs from rate base for the same reason I
15 indicated earlier - to help eliminate disputes.

16 **7. Remaining Rate Bases Issues.**

17 **Q. PLEASE DISCUSS THE REMAINING RATE BASE ISSUES BETWEEN**
18 **THE PARTIES.**

19 A. The Company does not agree with RUCO's proposed adjustments to PIS for
20 RUCO asserted unsupported capitalized affiliate labor and/or costs that were
21 associated with repair work.⁴²

22
23
24

⁴⁰ Michlik WW Dt. at 9.

25 ⁴¹ *Id.*

26 ⁴² S Rowell Dt. at 12.

1 Q. LET'S START WITH CAPITALIZED AFFILIATE LABOR. PLEASE
2 DISCUSS THE ISSUES RUCO HAS WITH THE AFFILIATE LABOR
3 COSTS.

4 A. I have already explained the nature of the capitalized labor costs earlier. As with
5 the water division, RUCO finds the Company did not adequately support the
6 capitalized affiliate labor for the Wastewater Division because it found
7 discrepancies in the amounts included in the Company's B-2 wastewater schedule
8 and information contained in a response to RUCO 3.7. The apparent discrepancy
9 is shown in Table 1 on page 20 of Ms. Rowell's direct testimony. Table 1
10 summarizes the year-to-year capitalized affiliate profit reflected on the Company's
11 B-2 wastewater schedule and the information provided by the Company in
12 response to RUCO data request MJR 3.7. But Ms. Rowell admits that there isn't a
13 large discrepancy in the total amount of capitalized affiliate profit but takes issue
14 with the year-to-year amounts.

15 For example, the total capitalized affiliate profit reflected in the Company's
16 B-2 water schedules totals \$651,163 and the total capitalized labor contained in the
17 information provided in response to MJR 3.7 totals \$655,330 - a difference of
18 \$4,167 or 0.6%. But, as explained by the Company in response to RUCO data
19 request 3.6, the capitalized labor is first recorded to construction work-in-progress
20 ("CWIP") and later transferred to PIS when the project is placed into service. So,
21 the year-to-year difference will exist when the labor cost is first capitalized and
22 when labor cost actually is reflected in PIS.

23 RUCO also finds the capitalized affiliate labor information to be inadequate
24 because the invoices provided in response to Staff data requests 1.52 and 1.77 for
25 affiliate labor contained almost no relevant information.⁴³ However, as explained

26 ⁴³ S Rowell Dt. at 18.

1 above, the detail of the capitalized labor was provided to all of the parties as part of
2 the Company's work papers and contained all the needed information.⁴⁴

3 **Q. PLEASE COMMENT ON THE CAPITALIZED REPAIR COSTS?**

4 A. The Company does not agree with RUCO that the repair costs is proposes to
5 disallow should not have been capitalized. I have discussed the reasons why earlier
6 in my testimony and will not repeat them here.

7 **Q. OK. LET'S MOVE ON. RUCO IS PROPOSING TO REMOVE \$1,230,049**
8 **FROM PLANT IN SERVICE TO ADJUST FOR DIFFERENCES IN THE**
9 **STARTING BALANCE OF PLANT-IN-SERVICE. DO YOU HAVE A**
10 **COMMENT?**

11 A. Yes. RUCO proposes to eliminate \$1,230,049 of cost for plant because it believes
12 its recommended plant balance should be the starting balance from the last case.⁴⁵
13 However, the evidence contradicts RUCO's position. The \$1,230,049 of cost was
14 related to a sewer line that was part of CWIP at the end of the last test year, but was
15 actually placed into service during the test year.⁴⁶ As a result, RUCO's adjustment
16 effectively eliminates plant found by Staff in the last rate case to be used and useful
17 and included in rate base.⁴⁷ I have included as a copy of the rate base schedule
18 from Staff's surrebuttal filing in the last rate case as **TJB-RB3 (Rate Base – Phase**
19 **I)**, which schedule matches the Company's starting balance of wastewater division
20 PIS and accumulated depreciation as found on the Company's wastewater
21 Schedule B-2, page 3.4.

22
23 ⁴⁴ Work paper file "LSPCo CAP Profit from Acquisition to Sept30 2008.xls."

24 ⁴⁵ S Rowell Dt. at 11.

25 ⁴⁶ See Rebuttal Testimony of Dan L. Neidlinger in Docket W-01428A-01-0487 and SW-01428A-01-0487
26 at 7; Rebuttal Testimony of David W. Ellis in Docket W-01428A-01-0487 and SW-01428A-01-0487 at 3.

⁴⁷ See Surrebuttal Testimony of Roger D. Nash in Docket W-01428A-01-0487 and SW-01428A-01-0487
at 2.

1 **Q. WASN'T THE LAST RATE CASE BASED ON A SETTLEMENT?**

2 A. Yes, and, I agree with RUCO that it was difficult to determine the starting balance
3 of plant for the wastewater division as a result. But, the best evidence of a starting
4 balance of plant is Staff's schedule.⁴⁸ RUCO's starting balance of plant in the last
5 case was not the result of over a dispute about whether the plant existed or its cost,
6 but rather a dispute about whether the costs should be included in rate base.⁴⁹

7 **Q. ARE THERE ANY OTHER REMAINING RATE BASE DISPUTES WITH**
8 **RUCO.**

9 A. Yes. RUCO proposes to exclude \$36,500 of cost related to work performed by
10 Pacific Advanced Civil Engineering related to the permitting of the Palm Valley
11 Water Reclamation Facility ("PVWRF").⁵⁰ The Company disagrees as addressed
12 in more detail in the rebuttal testimony of Mr. Sorenson.⁵¹

13 **Q. DOESN'T RUCO PROPOSE TO REMOVE NEARLY \$3.5 MILLION OF**
14 **COST RELATED TO THE PVWRF?**

15 A. Yes.⁵² RUCO recommends that 50% of the cost be disallowed because these costs
16 are related to correcting design problems with the PVWRF.⁵³ The Company
17 disagrees with RUCO. This issue is also addressed in more detail in the rebuttal
18 testimony of Mr. Sorenson.⁵⁴

19
20
21 ⁴⁸ Both Staff and the Company ultimately agreed that the full \$1,230,049 was useful and useful plant in
22 service for the test year in the last case.

23 ⁴⁹ See Surrebuttal Testimony of Timothy J. Coley in Docket W-01428A-01-0487 and SW-01428A-01-
24 0487 at 7.

25 ⁵⁰ S Rowell Dt. at 11-12.

26 ⁵¹ Sorensen Rb. at 18-20.

⁵² *Id.* at 13.

⁵³ See Direct Testimony of Mathew Rowell ("M Rowell Dt.") at 4-6.

⁵⁴ Sorensen Rb. at 14-15.

1 **Q. PLEASE RESPOND TO RUCO'S RECOMMENDATION TO INCREASE**
2 **CIAC FOR THE WASTEWATER DIVISION BY \$597,670.**

3 A. RUCO recommends increasing the wastewater division CIAC balance by 597,670
4 because the Company failed to include this amount in rate base.⁵⁵ However,
5 RUCO is incorrect. The \$597,670 was properly included in the water division rate
6 base. As evidenced by the Company's response to Staff data request JMM 1.28,
7 the \$570,670 was related to expired AIAC (refundable line extension agreement).

8 **Q. BUT DIDN'T THE COMPANY'S RESPONSE TO STAFF DATA REQUEST**
9 **JMM 1.27 INDICATE THAT THE WASTEWATER DIVISION'S CIAC**
10 **BALANCE WAS \$19,334,802 AND NOT \$18,737,132 AS SHOWN ON THE**
11 **COMPANY'S WASTEWATER RATE BASE SCHEDULE?**

12 A. Yes. The response to JMM 1.27 indicated the CIAC balance for the wastewater
13 division was higher by \$597,670. But JMM 1.27 also indicated that the water
14 division CIAC was lower by \$597,670.

15 **Q. PLEASE EXPLAIN.**

16 A. The response to JMM 1.27 also indicated that the water division's CIAC balance
17 was \$2,506,398 and not \$3,104,068 as shown on the Company's water division rate
18 base schedule in its direct filing. Putting aside the fact that the \$597,670 is related
19 to water division CIAC, if RUCO were consistent, it should have recommended
20 that the water division CIAC be decreased by \$597,670 and that the wastewater
21 division CIAC be increased by \$597,670. But, again, the Company's respective
22 rate base schedules for the water and wastewater division already reflect the correct
23 level of CIAC and do not need to be adjusted.

24
25
26 ⁵⁵ S Rowell Dt. at 11.

1 **IV. INCOME STATEMENT**

2 **A. Water Division Revenue and Expenses.**

3 **Q. WOULD YOU PLEASE DISCUSS THE COMPANY'S WATER DIVISION**
4 **PROPOSED ADJUSTMENTS TO REVENUES AND EXPENSES AND**
5 **IDENTIFY ANY ADJUSTMENTS YOU HAVE ACCEPTED FROM STAFF**
6 **AND/OR RUCO?**

7 **A.** The Company rebuttal adjustments for the Water Division are detailed on Rebuttal
8 Schedule C-2, pages 1-14. The rebuttal income statement with adjustments is
9 summarized on Rebuttal Schedule C-1, page 1-2.

10 Rebuttal adjustment 1 increases depreciation expense. Depreciation expense
11 is lower primarily due to the impacts of the Company proposed rebuttal
12 adjustments to plant-in-service. The difference in depreciation expense compared
13 to RUCO is primarily due to a difference in the respective parties proposed PIS.
14 The difference in depreciation expense compared to Staff is primarily due to a
15 difference in the respective party's computation of CIAC amortization. Staff uses
16 a composite depreciation rate for all depreciable PIS where as the Company uses
17 account specific rates for the plant accounts funded with CIAC. The Company
18 disagrees with Staff's method of computing amortization in the instant case.

19 **Q. WHY?**

20 **A.** Composite depreciation rates should be used when the CIAC amounts have not
21 been specifically identified with the plant accounts. Historically, the Company has
22 tracked its CIAC with the specific plant accounts and there is no reason to change
23 the practice of using the depreciation rates for these plant accounts to amortize
24 CIAC in the instant case.

1 **Q. PLEASE CONTINUE.**

2 Rebuttal adjustment number 2 increases property tax expense and reflects the
3 rebuttal proposed revenues. Staff and the Company are in agreement on the
4 method of computing property taxes. This method utilized the ADOR formula and
5 inputs two years of adjusted revenues plus one year of proposed revenues. I
6 computed the property taxes based on the Company's proposed revenues, and then
7 used the property tax rate and assessment ratio that was used in the direct filing.

8 Amazingly, RUCO uses the test year revenues and two historical years of
9 revenues (2006 and 2007). This is the same method RUCO argued for nearly a
10 decade, but recently appeared to drop in the face of uniform rejection by the
11 Commission. The Commission determines property taxes using historical and
12 projected revenues.⁵⁶

13 **Q. IS RUCO'S POSITION CONSISTENT WITH THEIR POSITION IN THE**
14 **RECENT BLACK MOUNTAIN SEWER CASE?**

15 A. No. In that case RUCO proposed that property taxes be computed using one year
16 of proposed revenues and two years of historical revenues.

17 **Q. HAS RUCO EXPLAINED WHY IT IS NOW GOING BACK TO A**
18 **METHOD THAT HAS BEEN REJECTED IN THE PAST?**

19 A. No.⁵⁷

20 **Q. PLEASE CONTINUE.**

21 A. Rebuttal adjustment number 3 removes meals and entertainment expenses
22 from miscellaneous expense. The adjustment reflects the Company acceptance of
23
24

25 ⁵⁶ See, e.g., Decision No. 64282 at 12-13; Decision No. 65350 at 15-16.

26 ⁵⁷ S Rowel Dt. at 9 and 17.

1 Staff proposed adjustment for meals and entertainment expenses.⁵⁸ RUCO has not
2 proposed a similar adjustment.

3 Rebuttal adjustment number 4 increases bad debt expense reflecting a
4 normalized level of bad debt expense proposed by Staff.⁵⁹ RUCO has not proposed
5 a similar adjustment.

6 Rebuttal adjustment number 5 normalizes fuel for power production
7 expenses and reduces expense by \$20,309. RUCO proposes to disallow \$56,381 of
8 fuel for power expenses incurred during the test year because they are non-
9 recurring. However, the Company believes these are typical and recurring
10 expenses and seeks to help minimize issues between the parties by normalizing the
11 expense.

12 Rebuttal adjustment number 6 reflects the adoption of RUCO proposed
13 adjustment to revenues for the City of Goodyear ("Goodyear"). While the
14 Company believes that Goodyear will not be a customer in the future, at the present
15 time Goodyear is still receiving service.

16 Rebuttal adjustment number 7 reduces chemical expense for expenses that
17 occurred outside the test year. RUCO proposes a similar adjustment totaling
18 \$2,309.⁶⁰ However, RUCO's adjustment contains errors. A review of the invoices
19 identified by RUCO⁶¹ and the Company's general ledger⁶² indicates that all of the
20 amounts with the exception of a \$305 invoice from Hills Brothers Chemicals are
21 reversed out and are not included in the test year expense. Staff does not propose a
22 similar adjustment.

23 ⁵⁸ Michlik W Dt. at 20.

24 ⁵⁹ *Id.* at 20-21.

25 ⁶⁰ S Rowell Dt. at 7.

26 ⁶¹ See RUCO Water Schedule 3, page 4 of 15.

⁶² See Company response to Staff data request JMM 1.40.

1 Rebuttal adjustment number 8 reduces contractual services –other expense
2 by \$19,989 for Company proposed capitalized expenses. RUCO makes a similar
3 adjustment for capitalized expenses totaling \$9,714.⁶³ RUCO also proposes to
4 remove from expense an additional \$19,912 for non-recurring expenses.⁶⁴ The
5 Company's adjustment of \$19,989 includes \$10,275 of the RUCO's asserted non-
6 recurring expenses.

7 **Q. WHAT IS THE REMAINING AMOUNT OF EXPENSE IN DISPUTE?**

8 A. The total expense RUCO recommends be disallowed in operating expenses is
9 \$29,625 (\$9,814 plus \$19,912). The Company recommends \$19,989 of these costs
10 be removed from expense and capitalized leaving a difference of \$9,636 (\$29,625
11 minus \$19,989). The Company believes the remaining \$9636 reflects the nature
12 and level of expense the Company expects to incur on a going forward basis and
13 therefore the costs should be allowed in operating expense.

14 Adjustment number 9 reduces contractual services – other which reflect a
15 portion of the \$8,451 RUCO seeks to remove from expense.⁶⁵

16 **Q. WHAT ARE THE EXPENSES INCLUDED IN RUCO'S PROPOSED**
17 **ADJUSTMENT THAT THE COMPANY AGREES TO REMOVE?**

18 A. The Company agrees to remove the allocated portion expenses related to a holiday
19 party and the costs for Diamondbacks games. RUCO seeks to exclude the costs of
20 dues and memberships, business publications, and travel. The Company believes
21 these are prudent and necessary expenses.

24

⁶³ See RUCO Water Schedule 3, page 5 of 15, lines 1-4.

25 ⁶⁴ See RUCO Water Schedule 3, page 5 of 15, lines 7-15.

26 ⁶⁵ See RUCO Water Schedule 3, page 7 of 15.

1 **Q. PLEASE CONTINUE.**

2 A. Rebuttal adjustment 10 reflects an increase to the allocated affiliate central office
3 costs and reflects actual cost incurred by the central office for the test year of
4 \$5,125,785.⁶⁶ The Company's adjustment is detailed on Rebuttal Schedule C-2,
5 page 11.

6 **Q. DID THE COMPANY REMOVE THE COSTS OF CHARITABLE**
7 **CONTRIBUTIONS, ENTERTAINMENT EXPENSES, AWARDS, AND IRS**
8 **PENALTIES FROM ITS CENTRAL OFFICE ALLOCATION POOL?**

9 A. Yes. The Company removed \$191,828 of costs Staff recommends to be disallowed
10 in operating expenses.⁶⁷

11 **Q. PLEASE COMMENT ON STAFF'S ADJUSTMENT FOR ALLOCATED**
12 **CENTRAL OFFICE COSTS?**

13 A. Staff is recommending an expense level of \$1,595 based on an adjusted central
14 office allocation pool of \$113,224 and an allocation factor of 1.41 percent. Staff's
15 allocation method and analysis of the benefits to LPSCO's water and wastewater
16 divisions is flawed. Staff eliminates 97 percent of the central office cost allocation
17 pool before allocating the remaining 3 percent to LPSCO's water and wastewater
18 divisions. As I testified in the pending BMSC rate case, APIF incurs the central
19 office cost for the benefit of its subsidiary businesses. APIF provides management,
20 financial, audit, tax, legal resources, and corporate governance for all of its
21 subsidiary businesses that would otherwise be incurred if they were a stand-alone
22 business. In other words, but for the subsidiary business APIF would not have
23 central office costs. But the real benefit under the APIF model is there enormous
24 economies of scale that are achieved.

25 ⁶⁶ See Company response to Staff data request JMM 5.5.

26 ⁶⁷ Michlik W Dt. at 18.

1 **Q. PLEASE COMMENT ON RUCO'S ADJUSTMENT TO ALLOCATED**
2 **CENTRAL OFFICE COSTS?**

3 A. In its direct testimony, RUCO recommends disallowing all the central office costs
4 for the water division.⁶⁸ RUCO agrees with the cost allocation methodology for
5 Liberty Water, but disallows all of the cost allocation from Algonquin Power Trust
6 ("APT").⁶⁹ RUCO bases its recommended disallowance of central office cost
7 allocation on several factors. First, RUCO claims it could not reconcile the
8 Company indicated central office cost allocation of \$250,979 with the amounts
9 based on the Company's billings for central office costs of \$291,708.⁷⁰ Second,
10 RUCO claims that during the test year, the Company increased its central office
11 cost billings without providing any explanation.⁷¹ Third, RUCO asserts the central
12 office cost invoices do not contain sufficient detail.⁷² Finally, RUCO claims that
13 the Company has not sufficiently explained the central office costs to determine
14 whether the services provided are necessary for the provision of service of
15 LPSCO.⁷³

16 **Q. PLEASE RESPOND TO RUCO'S CRITICISMS OF THE CENTRAL**
17 **OFFICE COST ALLOCATION?**

18 A. With respect to the first criticism, RUCO is correct that the actual Water Division
19 central office costs for the test year were \$291,708. The \$250,979 was based on a
20 2008 calendar year budget. RUCO's inability to reconcile those numbers stems
21 from RUCO's failure to understand that those numbers apply to a different time

22 ⁶⁸ M Rowell Dt. at 13.

23 ⁶⁹ M Rowell Dt. at 12-13.

24 ⁷⁰ *Id.*

25 ⁷¹ *Id.*

26 ⁷² *Id.*

⁷³ *Id.*

1 periods. As noted, the \$250,979 amount is for the budgeted central office costs for
2 the 2008 calendar year (January through December 2008) whereas the \$291,708
3 amount is for billed central office costs during the test year (September 2007-
4 October 2008). As I testified earlier, the central office costs have now been trued-
5 up to the actual test year central office costs incurred. Based on the Company's
6 rebuttal adjustment discussed previously, the correct allocation based on actual test
7 year cost is \$310,479.⁷⁴

8 **Q. PLEASE RESPOND TO RUCO'S OTHER CRITICISMS OF THE**
9 **CENTRAL OFFICE COST ALLOCATION?**

10 A. RUCO's second criticism is without merit. On this point, RUCO asserts that it
11 failed to explain or justify the increase in management fees from its affiliates.
12 RUCO admits that that the new method of cost allocation was not through the test
13 year.⁷⁵ The increase in the central office management fees during the test year is
14 irrelevant because the increased fees were the result of increased costs. As I
15 discussed previously, the actual central office cost pool for the test year is over \$5
16 million and the water division's allocated cost is much higher. It would appear that
17 the management fee increase was justified since the allocated central office cost of
18 \$310,479 is much higher than the test year fees of \$291,708.

19 RUCO's third and fourth criticisms also are without merit. I have examined
20 the documentation and there is sufficient detail to determine the nature and
21 amounts of the cost incurred by APT for the benefit of its subsidiaries.⁷⁶ A full
22 description of the cost categories was also provided to RUCO.⁷⁷

23
24 ⁷⁴ See Rebuttal Schedule C-2, page 11, Adjustment Number 11.

25 ⁷⁵ *Id.* at 9.

26 ⁷⁶ See Company response to Staff data request JMM 5.5.

⁷⁷ See Company response to Staff data request JMM 5.3.

1 **Q. ARE THERE ANY APPLICABLE REGULATORY GUIDELINES**
2 **RELATING TO SUPPORTING ITS AFFILIATE COST ALLOCATIONS**
3 **AND DID LPSCO FOLLOW THEM?**

4 **A.** Yes, and in my opinion, LPSCO complied with the applicable regulatory
5 guidelines in supporting and detailing its affiliate cost allocations. Specifically, I
6 believe that LPSCO complied with the National Association of Regulatory Utility
7 Commissioners ("NARUC") 1996 Uniform System of Accounts for Class A Water
8 Utilities, which states in paragraph 15 that "Each utility shall keep its accounts and
9 records so as to be able to furnish accurately and expeditiously statements of all
10 transactions with associated companies. The statements may be required to show
11 the general nature of the transactions, the amounts involved therein and the
12 amounts included in each account prescribed herein with respect to such
13 transactions." In my opinion, LPSCO's affiliate cost documentation meets the
14 NARUC System of Accounts. I also believe the LPSCO's affiliate cost allocation
15 methodology meets the NARUC Guidelines for Cost Allocations and Affiliate
16 Transactions.

17 **Q. PLEASE CONTINUE.**

18 **A.** Rebuttal adjustment 11 reflects the synchronization of interest expense with the
19 Company's proposed rate base.

20 Rebuttal adjustment 12 reflects income taxes at Company's proposed rates.

21 **1. Remaining Revenue and Expense Issues.**

22 **Q. PLEASE IDENTIFY ANY REMAINING ISSUES IN DISPUTE WITH**
23 **RUCO AND/OR STAFF.**

24 **A.** RUCO recommends that \$153,174 of allocated costs for the Water Division from
25 Liberty Water (formerly AWS) be disallowed.⁷⁸ One of the reasons RUCO uses to

26 ⁷⁸ M Rowell Dt. at 12.

1 justify the disallowance is that the Costs cannot be reconciled to the test year.⁷⁹
2 However, these Liberty Water allocated costs do reconcile. Let me explain. In
3 Table 3 on page 10 of Mr. Rowell's direct testimony, Mr. Rowell shows the total of
4 the allocated contract services for the Water Division from Liberty Water from as
5 \$1,520,179. In addition, Mr. Rowell shows the Recon fees to 4-factor for the
6 Water Division as \$728,574 which is also found in Table 3 but located on page 11
7 of his testimony. The two amounts total \$2,248,753 which is the amount recorded
8 in the test year for the Water Division. Below is the detail of the test year recorded
9 costs:⁸⁰

<u>Account/Description</u>	<u>Amount</u>
8600-2-0100-69-5200-0110 Contractual Services-AWS	510,643.02
8600-2-0100-69-5200-0120 Admin Allocation – AWS	728,574.18
8600-2-0100-50-5200-0110 Contractual Services-AWS	<u>1,009,535.94</u>
Total	2,248,753.14

13
14 In the Company direct filing, these costs were trued-up to the new cost allocation
15 methodology cost of \$1,942,519 by a reduction to the test year expenses of
16 \$306,234.⁸¹ The \$1,942,519 is the same amount contained the documentation
17 provided to RUCO.⁸²

18 **Q. WHAT OTHER REASON DOES RUCO PROVIDE FOR**
19 **RECOMMENDING DISALLOWANCE OF \$153,714 OF ALLOCATED**
20 **LIBERTY WATER (AWS) COSTS?**

21
22 ⁷⁹ *Id.*

23 ⁸⁰ See Company work paper file "Item #23 LPSCO Income Statement Comp by Segment 2005 2006 2007
24 2008.xls" provided in response to Staff data request JMM 2-10.

25 ⁸¹ See Direct Schedule C-2, page 12, Adjustment Number 11.

26 ⁸² See also Company response to RUCO data request MJR 3.3(b).

1 A. That the Company did not provide an explanation of what the allocations were.⁸³
2 However, RUCO was provided an explanation of costs and how the various types
3 of cost are allocated under the new methodology.⁸⁴ Put simply, RUCO claims that
4 LPSCO did not explain exactly what costs were included in the "Recon fees to 4
5 factor." For that reason, RUCO disallowed the \$153,714. Again, however, RUCO
6 and Mr. Rowell simply did not understand that the "Recon fees to 4 factor" was a
7 reconciliation and true-up of the 4 factor formula to the entire test year. In his
8 deposition, Mr. Rowell agreed that it is appropriate for LPSCO to true up and
9 reconcile the 4 factor data to the actual costs incurred.

10 **Q. PLEASE COMMENT ON DIFFERENCES BETWEEN THE PARTIES ON**
11 **RATE CASE EXPENSE.**

12 A. At this stage of the proceeding both the Company and Staff are proposing rate case
13 expense of \$210,000 for the water division and the same amount for wastewater.
14 This is consistent with the Company's original estimate of a total of \$420,000 for
15 the entire case. However, Staff is recommending an amortization period of five
16 years and an annual level of expense in the test year of \$42,000.⁸⁵ Mr. Michlik
17 justifies his amortization period because the Company has not filed a case in nine
18 years.⁸⁶ However, as Mr. Sorensen testifies, that is not likely to happen again.⁸⁷
19 This places authorized rate case expense at risk for non-recovery if the Company
20 were to come in before Staff's amortization period has passed.

21
22
23 ⁸³ M Rowell Dt. at 12.

24 ⁸⁴ See Company response to RUCO MJR 2.5.

25 ⁸⁵ Michlik Dt. at 18.

26 ⁸⁶ *Id.*

⁸⁷ Sorensen Rb. at 10.

1 Q. WHAT ABOUT RUCO'S RECOMMENDATION ON RATE CASE
2 EXPENSE?

3 A. RUCO is recommending a \$50,000 annual level of rate case expense.⁸⁸ However, I
4 do not know how RUCO determined that amount since there is no testimony or a
5 detail schedule showing the computation. As a result, I am unable to respond at
6 this time except to say that amount is too low.

7 B. Wastewater Division Revenue and Expenses.

8 Q. WOULD YOU PLEASE DISCUSS THE COMPANY'S WASTEWATER
9 DIVISION PROPOSED ADJUSTMENTS TO REVENUES AND EXPENSES
10 AND IDENTIFY ANY ADJUSTMENTS YOU HAVE ACCEPTED FROM
11 STAFF AND/OR RUCO?

12 A. The Company rebuttal adjustments for the Wastewater Division are detailed on
13 Rebuttal Schedule C-2, pages 1-14. The rebuttal income statement with
14 adjustments is summarized on Rebuttal Schedule C-1, page 1-2.

15 Rebuttal adjustment 1 increases depreciation expense. Depreciation expense
16 is lower primarily due to the impacts of the Company proposed rebuttal
17 adjustments to plant-in-service. The difference in depreciation expense compared
18 to RUCO is primarily due to a difference in the respective parties proposed PIS.
19 The difference in depreciation expense compared to Staff is primarily due to a
20 difference in the respective party's computation of CIAC amortization. Staff uses
21 a composite depreciation rate for all depreciable PIS where as the Company uses
22 account specific rates for the plant accounts funded with CIAC. The Company
23 disagrees with Staff's method of computing amortization in the instant case.

24
25
26 ⁸⁸ See RUCO Water Schedule 4, page 1 of 15.

1 **Q. WHY?**

2 A. Composite depreciation rates should be used when the CIAC amounts have not
3 been specifically identified with the plant accounts. Historically, the Company has
4 tracked its CIAC with the specific plant accounts and there is no reason to change
5 the practice of using the depreciation rates for these plant accounts to amortize
6 CIAC in the instant case.

7 **Q. PLEASE CONTINUE.**

8 Rebuttal adjustment number 2 increases property tax expense and reflects the
9 rebuttal proposed revenues. All the parties are in agreement on the method of
10 computing property taxes. This method utilized the ADOR formula and inputs two
11 years of adjusted revenues plus one year of proposed revenues. I computed the
12 property taxes based on the Company's proposed revenues, and then used the
13 property tax rate and assessment ration that was used in the direct filing.

14 Rebuttal adjustment number 3 removes contractual services costs (Aerotek)
15 that are related to BMSC's cost of service.

16 Rebuttal adjustment number 4 removes meals and entertainment expenses
17 from miscellaneous expense. The adjustment reflects the Company acceptance of
18 Staff proposed adjustment for meals and entertainment expenses.⁸⁹ RUCO has not
19 proposes a similar adjustment.

20 Rebuttal adjustment number 5 reduces bad debt expense reflecting a
21 normalized level of bad debt expense proposed by Staff.⁹⁰ RUCO has not proposed
22 a similar adjustment.

23 Rebuttal adjustment number 6 reduces contractual services –other expense
24 by \$33,705 for Company proposed capitalized expenses. RUCO makes a similar

25 ⁸⁹ Michlik WW Dt. at 18.

26 ⁹⁰ *Id.* at 19.

1 adjustment for capitalized expenses totaling \$17,124.⁹¹ RUCO also proposes to
2 remove from expense an additional \$16,582 for non-recurring expenses.⁹²
3 RUCO'S total adjustment of \$33,706 (\$17,124 plus \$16,582) is substantially the
4 same as the Company's adjustment of \$33,705. However, RUCO also proposes to
5 remove \$19,784 for effluent clean-up⁹³, \$16,428 for grounds maintenance and
6 sewer line cleaning⁹⁴ which the Company disagrees. The Company believes the
7 \$19,784 and the \$16,428 reflect the nature and level of expense the Company
8 expects to incur on a going forward basis and therefore the costs should be allowed
9 in operating expense.

10 Adjustment number 7 reduces contractual services – other for rate case costs
11 which are already included in rate case expense. RUCO has proposed a similar
12 adjustment⁹⁵ and the Company is substantial agreement with the Company.

13 Adjustment number 9 reduces contractual services – other which reflect a
14 portion of the \$3,128 RUCO seeks to remove from expense.⁹⁶

15 **Q. WHAT ARE THE EXPENSES INCLUDED IN RUCO'S PROPOSED**
16 **ADJUSTMENT THAT THE COMPANY AGREES TO REMOVE?**

17 **A.** The Company agrees to remove the allocated portion of expenses related to a
18 holiday party and the costs for Diamondbacks games. RUCO seeks to exclude the
19 costs of dues and memberships, business publications, and travel. The Company
20 believes these are prudent and necessary expenses.

21
22 ⁹¹ See RUCO Wastewater Schedule 3, page 5 of 19, lines 1-8.

23 ⁹² See RUCO Wastewater Schedule 3, page 5 of 19, lines 11-15.

24 ⁹³ See RUCO Wastewater Schedule 3, page 5 of 19, lines 18-20.

25 ⁹⁴ See RUCO Wastewater Schedule 3, page 5 of 19, lines 23-26.

26 ⁹⁵ See RUCO Wastewater Schedule 3, page 5 of 19, lines 29-32.

⁹⁶ See RUCO Water Schedule 3, page 7 of 15.

1 **Q. PLEASE CONTINUE.**

2 A. Rebuttal adjustment 10 reflects an increase to the allocated affiliate central office
3 costs and reflects actual cost incurred by the central office for the test year of
4 \$5,125,785.⁹⁷ The central office costs reflected in the actual test year expenses
5 were based on a budget of approximately \$3,950,800. The Company's adjustment
6 is detailed on Rebuttal Schedule C-2, page 10.

7 **Q. DID THE COMPANY REMOVE THE COSTS OF CHARITABLE**
8 **CONTRIBUTIONS, ENTERTAINMENT EXPENSES, AWARDS, AND IRS**
9 **PENALTIES FROM ITS CENTRAL OFFICE ALLOCATION POOL?**

10 A. Yes. The Company removed \$191,828 of costs Staff recommends to be disallowed
11 in operating expenses.⁹⁸

12 **Q. PLEASE COMMENT ON STAFF'S ADJUSTMENT FOR ALLOCATED**
13 **CENTRAL OFFICE COSTS?**

14 A. Staff is recommending an expense level of \$1,595 based on an adjusted central
15 office allocation pool of \$113,224 and an allocation factor of 1.41 percent. Staff's
16 allocation method and analysis of the benefits to LPSCO's water and wastewater
17 divisions is flawed. Staff eliminates 97 percent of the central office cost allocation
18 pool before allocating the remaining 3 percent to LPSCO's water and wastewater
19 divisions. As I testified in the pending BMSC rate case, APIF incurs the central
20 office cost for the benefit of its subsidiary businesses. APIF provides management,
21 financial, audit, tax, legal resources, and corporate governance for all of its
22 subsidiary businesses that would otherwise be incurred if they were a stand-alone
23 business. In other words, but for the subsidiary business APIF would not have
24

25 ⁹⁷ See Company response to Staff data request JMM 5.5.

26 ⁹⁸ Michlik WW Dt. at 16.

1 central office costs. But the real benefit under the APIF model is there enormous
2 economies of scale that are achieved.

3 **Q. PLEASE COMMENT ON RUCO'S ADJUSTMENT TO ALLOCATED**
4 **CENTRAL OFFICE COSTS?**

5 A. RUCO recommends disallowing all the central office costs for the wastewater
6 division.⁹⁹ RUCO bases its recommended disallowance of central office cost
7 allocation on several factors. First, RUCO could not reconcile the Company
8 indicated central office cost allocation of \$267,462 with the amounts based on the
9 Company's billings for central office costs of \$191,850.¹⁰⁰ Second, RUCO asserts
10 that during the test year, the Company increased its central office cost billings
11 without providing any explanation.¹⁰¹ Third, RUCO again asserts the central office
12 cost invoices do not contain sufficient detail.¹⁰² Finally, RUCO claims that the
13 Company has not sufficiently explained the central office costs to determine
14 whether the services provided are necessary for the provision of service of
15 LPSCO.¹⁰³

16 **Q. PLEASE RESPOND TO RUCO'S CRITICISMS OF THE CENTRAL**
17 **OFFICE COST ALLOCATION?**

18 A. With respect to the first criticism, RUCO is correct that the actual wastewater
19 division central office costs for the test year were \$191,850. The \$267,462 was
20 based on a 2008 calendar year budget. As noted above, RUCO's inability to
21 reconcile those numbers stems from RUCO's failure to understand that those

22
23 ⁹⁹ M Rowell Dt. at 13.

24 ¹⁰⁰ *Id.*

25 ¹⁰¹ *Id.*

26 ¹⁰² *Id.*

¹⁰³ *Id.*

1 numbers apply to different time periods. As also noted, the \$267,462 amount is for
2 central office costs for the 2008 calendar year (January-December 2008), whereas
3 the \$191,850 amount is for central office costs incurred during the test year
4 (September 2007-October 2008). Based on the Company's rebuttal adjustment
5 discussed previously, the correct allocation based on actual test year cost is
6 \$343,688.¹⁰⁴ I have responded to the other criticisms earlier in my testimony and
7 will not repeat that testimony here. I would note that, again, I believe that
8 LPSCO's documentation in support of its affiliate cost allocations meets the
9 applicable NARUC guidelines as mentioned above.

10 **Q. PLEASE CONTINUE.**

11 **A.** Rebuttal adjustment 10 reflects the synchronization of interest expense with the
12 Company's proposed rate base.

13 Rebuttal adjustment 11 reflects income taxes at Company's proposed rates.

14 **1. Remaining Revenue and Expense Issues.**

15 **A.** RUCO recommends that \$102,116 of allocated costs for the wastewater division
16 from Liberty Water (formerly Algonquin Water Services or AWS) be
17 disallowed.¹⁰⁵ One of the reasons RUCO uses to justify the disallowance is that the
18 Costs cannot be reconciled to the test year.¹⁰⁶ However, these Liberty Water
19 allocated costs do reconcile. Let me explain. In Table 3 on page 10 of Mr.
20 Rowell's direct testimony, Mr. Rowell shows the total of the allocated contract
21 services for the Wastewater Division from Liberty Water as \$1,260,574. In
22 addition, Mr. Rowell shows the Recon fees to 4-factor for the wastewater division
23 as \$785,716 which is also found in Table 3 but located on page 11 of his testimony.

24 ¹⁰⁴ See Rebuttal Schedule C-2, page 10, Adjustment 9.

25 ¹⁰⁵ M Rowell Dt. at 12.

26 ¹⁰⁶ *Id.*

1 The two amounts total \$1,746,290 which is the amount recorded in the test year for
2 the Wastewater Division. Below is the detail of those recorded costs:¹⁰⁷

<u>Account and Description</u>	<u>Amount</u>
8600-2-0200-69-5200-0110 Contractual Services-AWS	539,992.43
8600-2-0200-69-5200-0120 Admin Allocation – AWS	485,716.12
8600-2-0200-50-5200-0110 Contractual Services-AWS	<u>720,581.27</u>
Total	1,746,289.82

6
7 In the Company direct filing, these costs were trued-up to the new cost allocation
8 methodology cost of \$2,092,975 by an increase to the test year expenses of
9 \$346,685.¹⁰⁸ The \$2,092,975 is the same amount contained the documentation
10 provided to RUCO.¹⁰⁹ I also would restate what I noted above. RUCO claims that
11 LPSCO did not explain exactly what costs were included in the “Recon fees to 4
12 factor” and, therefore, Mr. Rowell disallowed \$102,116 in costs. Again, however,
13 RUCO and Mr. Rowell simply did not understand that the “Recon fees to 4 factor”
14 was a reconciliation and true-up of the 4 factor formula to the entire test year. I
15 also would restate that, in his deposition, Mr. Rowell agreed that it is appropriate
16 for LPSCO to true up and reconcile the 4 factor data to the actual costs incurred.

17 **A. Rebuttal to PebbleCreek on Accounting Issues.**

18 **Q. HAVE YOU REVIEWED THE DIRECT TESTIMONY BY PHIL**
19 **ZEBLISKY ON BEHALF OF PEBBLECREEK?**

20 **A.** Yes. Most of Mr. Zeblisky's testimony addresses developer background
21 information that is not pertinent to my testimony. Besides, those issues along with
22 the hook up fees have been moved into a second phase.

23
24 ¹⁰⁷ See Company work paper file “Item #23 LPSCO Income Statement Comp by Segment 2005 2006 2007
2008.xls” provided in response to JMM 2-10.

25 ¹⁰⁸ See Direct Schedule C-2, page 12, Adjustment Number 11.

26 ¹⁰⁹ See also Company response to RUCO data request MJR 3.3(b).

1 Q. SO WHAT ASPECTS OF MR. ZEBLISKY'S TESTIMONY WILL YOU
2 ADDRESS IN THIS PHASE?

3 A. First, Mr. Zeblisky requisitions a number of plant classifications. Second, he
4 suggests a deduction to rate base for out of test year advance-in-aid of construction.

5 Q. DO YOU AGREE WITH MR. ZEBLISKY THAT CERTAIN PLANT
6 CLASSIFICATIONS ARE IN ERROR?

7 A. No, and neither does Staff's experienced engineer, Marlin Scott, Jr.

8 Q. SO WHAT IS ZEBLISKY'S ISSUE?

9 A. Mr. Zeblisky believes that certain plant cost should have been recorded differently
10 and if those plant reclassifications were made it would facilitate a more accurate
11 computation of a hook-up fee.¹¹⁰

12 Q. DO YOU AGREE THAT THE ACCURACY OF A HOOK-UP FEE
13 COMPUTATION IS IMPEDED BY ALLEGED MISCHARACTERIZED
14 PLANT IN THE COMPANY'S PLANT LEDGERS?

15 A. No. Hook-up fees are based on projected costs of facilities, not recorded costs.

16 Q. PLEASE CONTINUE.

17 A. Mr. Zeblisky also suggests that the alleged mischaracterized plant may have an
18 impact on the accuracy of rates.¹¹¹ For example, he states that believes that if the
19 \$7 million costs indicated by Mr. Sorenson for the Palm Valley Reclamation
20 Facility ("PVWRF") were recorded entirely as treatment and disposal equipment
21 that rates would be higher because this plant account has a higher depreciation
22 rate.¹¹² However, without a complete analysis of all plant accounts, project costs
23 and records for the PVWRF this is pure speculation.

24 ¹¹⁰ Direct testimony of Philip Zeblisky ("Zeblisky Dt.") at 18.

25 ¹¹¹ *Id.*

26 ¹¹² *Id.*

1 **Q. WOULD ALL COSTS OF A WASTEWATER TREATMENT FACILITY**
2 **PROJECT BE RECORDED IN THE WASTEWATER TREATMENT AND**
3 **DISPOSAL EQUIPMENT PLANT ACCOUNT?**

4 A. In my experience, no. Generally these projects include the costs of buildings,
5 concrete structures, lift stations, pumping equipment, fencing, special collecting
6 structures, odor control units, etc., and the costs could be recorded in a variety of
7 different plant accounts depending on how detailed one might be in allocating the
8 cost of the wastewater treatment project. Technically, you could record the entire
9 cost in one or two plant accounts. In the end, the composite depreciation rate based
10 on a mix of plant costs that are recorded to four or five different plant accounts
11 may not be materially different than the composite depreciation rate based on a mix
12 of plant costs that are recorded to one or two different plant accounts. In other
13 words, the resulting depreciation expense would not be materially different nor
14 would rates. Again, at this point, all Mr. Zeblisky offers is pure speculation.

15 **Q. DO YOU HAVE ANY FURTHER COMMENTS?**

16 A. Yes. I would add that the depreciation rates that are generally employed, including
17 those in the instant case, are based on the typical and customary estimated useful
18 life of the underlying plant and equipment. Truly accurate depreciation rates are
19 not achieved unless a costly depreciation study is prepared by an engineer because
20 the useful life of plant is dependent upon many different factors, some of which are
21 geographically specific.

22 **Q. PLEASE RESPOND TO MR. ZEBLISKY'S SUGGESTION THAT OVER**
23 **\$4.8 MILLION OF PAYMENTS MADE TO LPSO FOR FUTURE PLANT**
24 **CAPACITY UNDER A REFUNDABLE LINE EXTENSION AGREEMENT**
25 **SHOULD BE INCLUDED IN THE COMPANY'S RATE BASE?**
26

1 A. PebbleCreek witness, Mr. Zeblisky, believes that approximately \$4.8 million of
2 AIAC payments made by a developer after the end of the test year should be
3 considered in rate base in the instant case. Mr. Zeblisky ignores the fact that the
4 payment is for future plant capacity and future customers. Until the plant is
5 recognized in rate base then neither should the AIAC. Otherwise, a mismatch in
6 rate base, revenue, and expenses will occur. This is a basic principle of rate
7 making.

8 **Q. HASN'T THE COMMISSION RECENTLY INCLUDED UNEXPENDED**
9 **AIAC AND CIAC INTENDED FOR FUTURE PLANT IN RATE BASE FOR**
10 **H2O, INC.?**

11 A. Yes.¹¹³ In my opinion the Commission's decision is seriously flawed. My
12 testimony in the recent H2O rate case explains my position and I will not repeat it
13 here. Put simply, it is bad and improper ratemaking to include in rate base AIAC
14 and CIAC when the associated plant is not included. Having said that, I believe the
15 circumstances in the instant case are different than the circumstances the
16 Commission relied on in the H2O case. First, the payment was received by the
17 Company after the end of the test year and was not recorded on the books as of the
18 end of the test year. I believe the Commission's "rule" as applied in the H2O rate
19 case to include all CIAC and AIAC recorded at the end of the test year does not
20 apply. Neither Staff nor the Commission sought to include CIAC or AIAC
21 payments received by H2O after the end of the test year in the H2O rate case.
22 Second, the monies received were for a specific purpose from a specific developer
23 to build treatment capacity for a mall project. After receiving the monies, the
24

25 ¹¹³ *In the Matter of the Application of H2O, Inc. for a Determination of the Current Fair Value of Its*
26 *Utility Property and for an Increase in Its Water Rates and Charges for Utility Services*, Docket No. W-
02234A-07-0557.

1 developer postponed the mall project for what could be several years. The
2 developer has not sought a refund presumably because it would have to pay higher
3 costs in the future. Fourth, the monies received are not the collection of a hook-up
4 fee under which a utility largely controls which backbone facilities it constructs
5 with the money. Fifth, the Company will refund the monies if faced with the risk
6 of its imputation of \$4.8 million of AIAC into the Company's wastewater division
7 rate base without the corresponding PIS. Mr. Sorenson discusses this further in his
8 rebuttal testimony.

9 **V. RATE DESIGN.**

10 **A. Water Division Rate Design.**

11 **Q. WHAT ARE THE COMPANY'S PROPOSED RATES FOR WATER**
12 **SERVICE?**

13 **A. The Company's proposed rates are:**

14 **MONTHLY SERVICE CHARGES**

15	5/8" x 3/4" meters	\$10.32
16	3/4" Meters	\$26.32
17	1" Meters	\$43.86
18	1 1/2" Meters	\$54.08
19	2" Meters	\$66.56
20	3" Meters	\$133.12
21	4" Meters	\$208.00
22	6" Meters	\$416.00
23	8" Meters	\$499.20
24	10" Meters	\$956.80
25	12" Meters	\$1,248.00
26	Construction Water - Hydrants	By meter size

1	Bulk Water	By meter size	
2	<u>COMMODITY RATES</u>		
3	5/8" and 3/4" Meters - Res.	1 to 3,000	\$ 1.22
4		3,001 to 9,000	\$ 1.82
5		Over 9,000	\$ 2.42
6	5/8" and 3/4" Meters - Com., Irr.	1 to 10,000	\$ 1.82
7		Over 10,000	\$ 2.42
8	1" Meters	1 to 20,000	\$ 1.82
9		Over 20,000	\$ 2.42
10	1 1/2" Meters	1 to 30,000	\$ 1.82
11		Over 30,000	\$ 2.42
12	2" Meters	1 to 50,000	\$ 1.82
13		Over 50,000	\$ 2.42
14	3" Meters	1 to 120,000	\$ 1.82
15		Over 120,000	\$ 2.42
16	4" Meters	1 to 180,000	\$ 1.82
17		Over 180,000	\$ 2.42
18	6" Meters	1 to 360,000	\$ 1.82
19		Over 360,000	\$ 2.42
20	8" Meters	1 to 670,000	\$ 1.82
21		Over 670,000	\$ 2.42
22	10" Meters	1 to 940,000	\$ 1.82
23		Over 940,000	\$ 2.42
24	12" Meters	1 to 1,248,000	\$ 1.82
25		Over 1,248,000	\$ 2.42
26	Construction (Hydrant) Water	All gallons	\$ 2.42

1 Bulk Water All gallons \$ 1.47

2 **Q. HAVE THE COMPANY CHANGED IT PROPOSED RATE DESIGN?**

3 A. Yes. The Company added a new customer class "Bulk Water". Currently the
4 Company delivers water the City of Goodyear (8 inch meters) and occasionally
5 delivers water to Valley Utilities Water Company (4 inch meter). The Company
6 believes that a separate rate should exists for these other water providers that
7 reflects the usage and design to meet these water provider needs. As I will discuss
8 later, while Goodyear will be charged a lower commodity rate, it is more than
9 covering its cost of service.

10 **Q. PLEASE COMMENT ON THE PROPOSED RATE DESIGNS OF STAFF**
11 **AND RUCO?**

12 A. Like the Company, Staff is proposing an inverted three tier design for the smaller
13 metered residential customers (5/8 inch and 3/4 inch) and an inverted two tier design
14 for the small commercial metered customers (5/8 inch and 3/4 inch) as well as 1
15 inch and larger metered customers (all classes) with the exception of construction
16 water. Staff break-over points are different than the Company's. However, like
17 the Company, Staff's break-over points increase with meter size. The first tier
18 commodity rate of the small commercial metered customers and 1 inch and larger
19 metered customers is the same as the second tier of the small residential metered
20 customers. The second tier of the small commercial metered customers and 1 inch
21 and larger metered customers is the same as the third tier of the small residential
22 metered customers. Other than the bulk water rate that the Company is now
23 proposing, the primary difference in the rate designs is in the commodity rate
24 charged and the level of revenue recovery from each class of customer.

25 It is difficult to be too specific on Staff's proposed rate design at this time
26 with respect to the impact on the various customer class or on how Staff's proposed

1 rates perform under a cost of service study because Staff's proposed rates do not
2 produce Staff's recommended revenue requirement. It appears that Staff's
3 proposed rates produce too little revenue - on the order of \$750,000 to \$800,000. I
4 notified Staff of my concern nearly a month ago (November 6, 2009), but Staff has
5 not responded with either a correction or an explanation. Based on Staff's
6 proposed rates it would appear that Staff's proposed rate design shifts revenue
7 recovery away from the 3/4 inch residential class to the larger metered customer
8 classes. I am confident I would find the 3/4 inch residential class under Staff's
9 proposed rate design is heavily subsidized by the other customer classes. I hesitate
10 at this time to provide the specific indications of the level of subsidization based on
11 a cost of service study because of the problem with Staff's proposed rates
12 mentioned earlier. However, at this point I believe the high subsidization exists
13 because Staff's proposed rate design contains a relatively low monthly minimum
14 and a relatively low first-tier commodity rate for the 3/4 inch metered residential
15 customers. This will result in a revenue shift away from the 3/4 inch residential
16 customers to the other customer classes. Recognizing that Staff's proposed rates
17 do not produce its recommended revenue requirement, Staff's proposed rates for
18 the 3/4 inch residential class provides approximately 25% of the revenues from all
19 customer classes. Under the present rate design, the 3/4 inch customers provide
20 more than 30% of revenues.

21 Staff admits that a characteristic of its proposed rate design is that it serves
22 as a supplementary life-line rate.¹¹⁴ However, in my opinion, Staff's places too
23 much emphasis on keeping rates low for the 5/8 inch and 3/4 inch residential classes
24 in its proposed rate design. Rates which are primarily focused on affordability to
25

26 ¹¹⁴ Direct testimony of Pedro M. Chaves ("Chaves Dt.") at 4.

1 one or more classes of customers should not be the primary consideration of good
2 rate design. Rate designs should achieve certain objectives within the of context
3 water availability, socioeconomic status and concerns of customers, who are the
4 major customer classes and major customers, and customer and utility concerns,
5 among others.¹¹⁵ In my experience, small residential customers are typically
6 subsidized to varying degrees. But, a balance between the needs of the customers
7 and the needs of the utility should be achieved. As suggested by the American
8 Water Works Association, common objectives of rate designs for utilities and their
9 customers are:¹¹⁶

- 10 1. yielding necessary revenue in a stable and predictable manner;
- 11 2. minimizing unexpected changes in customer bills;
- 12 3. discouraging wasteful use and promoting justified uses;
- 13 4. promoting fairness and equity;
- 14 5. avoiding discrimination;
- 15 6. maintaining simplicity, certainty, convenience, and freedom from
16 controversy.

17 **Q. WHAT ARE LIFE-LINE RATES?**

18 A. A life-line rate typically provides an initial low, below cost rate block for a
19 specified volume of water. Life-line rates are intended to provide a minimal or
20 essential volume of water service to those residential customers considered to be
21 unable to afford a minimal level of service at normal rates.¹¹⁷ I do not believe low
22 life-line like rates should be made available to all smaller metered residential
23 customers as is proposed by Staff.

24 ¹¹⁵ *Principles of Water Rates, Fees, and Charges*. American Water Works Association. 2000. pp

25 ¹¹⁶ *Id.*

26 ¹¹⁷ *Id.* at 326.

1 **Q. ISN'T THE COMPANY PROPOSING A LOW-INCOME TARIFF?**

2 A. Yes, and Staff supports it. This is to address affordability issues for some
3 residential customers. The Company is proposing a low income tariff which
4 provides discounts to qualified low income residential customers.¹¹⁸ Of course,
5 these customers will be subsidized by all other customers. Putting that aside, low-
6 income discounts are used for the same purpose as life-line block rates - to provide
7 a cost for rate payers who are considered unable to afford water service under the
8 basic rate design.

9 **Q. DO YOU HAVE ANY FURTHER COMMENTS ON STAFF'S RATE**
10 **DESIGN?**

11 A. No. Again, I hesitate to comment on Staff's rate design because of the problem I
12 mentioned earlier. Hopefully, Staff will address this issue by the time it files
13 surrebuttal in the instant case so that I can be more specific as to how its rate
14 design performs under a cost of service study.

15 **Q. HAS STAFF AND OR RUCO COMMENTED ON THE COMPANY'S COST**
16 **OF SERVICE STUDY?**

17 A. No. I can only conclude they agree entirely with my findings.

18 **Q. PLEASE COMMENT ON RUCO'S RATE DESIGN?**

19 A. RUCO is proposing an inverted three tier design for the smaller metered residential
20 and commercial customers (5/8 inch and 3/4 inch) and an inverted two tier design
21 for the small irrigation metered customers (5/8 inch and 3/4 inch) as well as 1 inch
22 and larger metered customers (all classes) with the exception of construction water.
23 RUCO's break-over points are different than the Company's. However, like the
24 Company, RUCO's break-over points increase with meter size. The first tier

25
26 ¹¹⁸ *Id.*

1 commodity rate of the 1 inch and larger metered customers (except irrigation) is
2 the same as the second tier of the small residential and commercial metered
3 customers. The second tier of the 1 inch and larger metered customers (except
4 irrigation) is the same as the third tier of the small residential and commercial
5 metered customers. The irrigation customers have different commodity rates for
6 both tiers but they are similar to the commodity rates of the non irrigation 1 inch
7 and larger meters.

8 Like Staff, I find that RUCO's proposed rates do not produce its
9 recommended revenue requirement. I discovered this recently and will contact
10 RUCO to try to resolve the issue. Unlike Staff's proposed rate design, RUCO's
11 proposed rate design produces too much revenue – on the order of \$1.4 million to
12 \$1.5 million. As with the Staff proposed rate design, It is difficult to be too
13 specific on RUCO's proposed rate design at this time with respect to the impact on
14 the various customer class or on how RUCO's proposed rates perform under a cost
15 of service study because of this problem. However, like Staff's proposed rate
16 design, I believe a high level of subsidization exists for the ¾ inch metered
17 residential class under RUCO's proposed rate design because of the relatively low
18 monthly minimums and low first tier commodity rate. Again, recognizing that
19 RUCO's proposed rates do not produce its recommended revenue requirement,
20 RUCO's proposed rates for the ¾ inch residential class provides approximately
21 27% of the revenues from all customer classes. Under the present rate design, the
22 ¾ inch customers provide more than 30% of revenues.

23 **1. Cost of Service Study.**

24 **Q. HAVE YOU UPDATED YOUR COST OF SERVICE STUDY?**

25 **A.** Yes. I have updated my cost of service study to reflect the changes to rate base,
26 revenues and expenses contained in the Company's rebuttal filing.

1 **Q. WHAT MODIFICATIONS HAVE YOU MADE?**

2 A. I have revised the G-1 summary schedule to reflect income taxes at present rates
3 rather than at proposed rates. I have done this in response to the City of Litchfield
4 Park witness's comments on my study.¹¹⁹

5 **Q. DOES THE REVISED G-1 RESULTS CHANGE YOUR CONCLUSIONS IN**
6 **YOUR DIRECT TESTIMONY REGARDING THE SMALLER METERED**
7 **CUSTOMERS BEING SIGNIFICANTLY SUBSIDIZED BY THE LARGER**
8 **METERED CUSTOMERS UNDER THE PRESENT RATE DESIGN?**

9 A. No. Nor would it change my conclusion that under a cost based rate design the
10 monthly minimums would be much higher, and the commodity rates much lower,
11 than under the present rate design. Further, it would not change my concerns about
12 setting rates below the indicated cost based monthly minimums and setting the
13 commodity rates above the cost of cost based commodity rates.

14 **Q. HAVE YOU CHANGED THE ALLOCATION FACTOR FOR THE POWER**
15 **COSTS IN RESPONSE TO MR. DARNALL'S TESTIMONY?**

16 A. No. Mr. Darnell suggests that the pumping power cost be allocated 5% to demand
17 and 95% to commodity.¹²⁰ It is my professional judgment that pumping power is
18 directly related to the gallons pumped so 100% of the cost should be allocated to
19 pumping power. Unless the pumps are running there are no pumping power costs.
20 Mr. Darnall disagree and I on this point, but in the end the allocation factor change
21 would have only a minor impact on the cost of service results and would not cause
22 me to change the proposed rate design as a result.

23
24
25 ¹¹⁹ Direct testimony of Richard L. Darnall ("Darnall Dt") at 3.

26 ¹²⁰ Darnall Dt. at 6.

1 **Q. HAVE YOU MODIFIED YOU DEMAND ALLOCATION FACTORS?**

2 A. No. Mr. Darnall and I can agree to disagree on his point that my demand allocation
3 factors are faulty. Mr. Darnall uses an estimate of peak demand factors based on
4 the Company's master plan prepared several years ago and based on information
5 that may have been captured several years earlier than that.¹²¹ In any case, the
6 basis of his factor is no less an estimate than mine and, in my opinion, less
7 appropriate because he does not consider maximum peak day and maximum peak
8 hour data. I have based my demand factors on the relative flows of the larger
9 meters compared to a 5/8 inch meter and therefore reflect relative maximum
10 potential demand placed on the system by the various customer classes. My
11 demand allocation factors do in fact have a direct relationship to the size of the
12 investment required to serve the various classes of customers. Relative flow
13 factors are often used to set hook-up fees for larger metered customers, including
14 the Commission Engineering staff, because of the direct relationship to the amount
15 of investment required.

16 Having said that, in order to develop accurate maximum daily and/or daily
17 demand data which would serve as the basis for developing appropriate allocation
18 factors, demand meters must be installed and the data must be reviewed,
19 interpolated, and expanded to fit the entire class of customers. Because of the
20 significant financial resources required, most utilities do not have this type of
21 information. Eventually, the Company may purchase and install the systems
22 required to capture this data (automated meter data gathering and integration and
23 SCADA), but sadly it is not and this data is not available.

24
25
26

¹²¹ Darnall Dt. at 6.

1 Q. PLEASE DISCUSS THE RESULTS OF YOUR UPDATED STUDY.

2 A. As shown on the G-2 schedule, the ¾ inch metered residential class (the largest
3 customer class) stills provide the lowest return at 7.94% at proposed rates and,
4 therefore, continues to pay less than their cost of service¹²² and to be subsidized by
5 the larger metered customers under proposed rates. The 1 inch, 1 ½ inch, 2 inch,
6 and the 4 inch metered classes provide returns of 10.47%, 18.59%, 16.71%,
7 23.91%, respectively. The 8 inch metered class (Goodyear) provides the highest
8 return of 75.43%.

9 Q. WHY DIDN'T YOU PROPOSE A SPECIAL MUNICIPAL WATER TARIFF
10 IN YOUR DIRECT TESTIMONY AS SUGGESTED BY MR. DARNELL ON
11 PAGE 7 OF HIS TESTIMONY?

12 A. Because it was assumed that the City of Goodyear ("Goodyear") would no longer
13 be a customer. In its rebuttal, the Company has put the revenues from Goodyear
14 back into its revenues. But, the Company remains concerned about its revenue
15 stability and earnings as Goodyear may leave the system in the next year or so.
16 The revenue loss from Goodyear's departure will have a significant financial
17 impact on the Company and likely require another rate case.

18 B. Wastewater Division Rate Design.

19 Q. WHAT ARE THE COMPANY'S PROPOSED RATES FOR
20 WASTEWATER SERVICE?

21 A. The Company's proposed rates are:

22 Monthly Residential Service \$ 48.21

23 Multi-Unit Housing - Monthly Per Unit \$ 44.76

24 Commercial:

25
26 ¹²² To pay full cost of service a customer class must achieve the required return. In the instant case, the Company is proposing an 11% rate of return based on its weighted average cost of capital.

1	Small Commercial - Monthly Service	\$ 81.54
2	Measured Service:	
3	Regular Domestic:	
4	Monthly Service Charge	\$ 45.64
5	Rate Per 1,000 Gallons of Water	\$ 3.99
6	Restaurants, Motels, Grocery Stores &	
7	Dry Cleaning Establishments: (1)	
8	Monthly Service Charge	\$ 45.64
9	Rate Per 1,000 Gallons of Water	\$ 5.32
10	Wigwam Resort:	
11	Monthly Rate - Per Room	\$ 44.76
12	Main Hotel Facilities - Per Month	\$1,772.50
13	Schools - Monthly Service Rates:	
14	Elementary Schools	\$1,205.30
15	Middle Schools	\$1,418.00
16	High Schools	\$1,418.00
17	Community College	\$2,197.90
18	Effluent	Market Rate

19 **Q. PLEASE COMMENT ON THE DIFFERENCES BETWEEN THE PARTIES**
20 **ON THE WASTEWATER RATE DESIGN.**

21 A. The Company and Staff propose similar rate designs and apply their respective rate
22 increase evenly across all customer classes. The rate schedule was missing from
23 the RUCO filing but I assume RUCO did the same thing.

24 **Q. DO THE STAFF AND RUCO RATES SUFFER FROM THE SAME**
25 **PROBLEM YOU IDENTIFIED IN THEIR RESPECTIVE WATER RATES?**

26 A. For Staff, the answer is yes. Staff's proposed wastewater rates do not produce its

1 recommended revenue requirement. Staff rate produce revenues which are short
2 by about \$120,000. I cannot answer this question for the RUCO proposed
3 wastewater rates. I am unable to check the RUCO proposed rates because as I
4 noted previously the RUCO testimony does not appear to contain a rate schedule
5 for the wastewater division.

6 **Q. DOES RUCO PROPOSE AN EFFLUENT RATE NOT BASED ON**
7 **MARKET RATES?**

8 A. Yes.¹²³ RUCO proposes a rate of \$1.50 per 1,000 gallons suggesting that the rates
9 the Company current charges are excessively low.¹²⁴

10 **Q. DOES RUCO OFFER ANY EVIDENCE THAT THE COMPANY'S**
11 **EFFLUENT RATES ARE EXCESSIVELY LOW?**

12 A. No.

13 **Q. DO YOU FIND THE \$1.50 PER THOUSAND GALLONS EXCESSIVE?**

14 A. Absolutely. RUCO's rate translates to nearly \$490 an acre foot. That's four times
15 the cost of untreated Central Arizona Project water. It is also more than double the
16 cost of pumping groundwater. The golf courses to which the Company delivers
17 effluent can pump their own groundwater from their own wells and will if they are
18 required to pay the rate RUCO proposes. Further, it more than double the highest
19 market rate the Company is currently able to charge effluent customers. RUCO's
20 effluent rate proposal if adopted would mean that the Company would no longer be
21 able dispose of the significant amounts of effluent generated by its wastewater
22 treatment plants and would have to seek much more costly means of disposal.
23 Finding alternative method of disposing of effluent will take time and significant
24 capital investment. In the interim the Company will have no place to dispose of

25 ¹²³ S Rowell Dt. at 26.

26 ¹²⁴ *Id.*

1 effluent. One alternative might be the use of recharge wells. This assumes that the
2 Company can find suitable land within close proximity to the wastewater
3 treatment plants and can get the required permits and approvals. In any case, in the
4 pending Far West Water and Sewer rate case¹²⁵, for example, I computed a cost of
5 at least \$1.08 per thousand gallons for dispose of effluent via vadose wells
6 (recharge wells). I suspect the costs will be higher for LPSCO because land for
7 placing the vadose wells would be more expensive in Phoenix as compared to Yuma,
8 and there would likely have to be more vadose wells to recharge the higher volume
9 of effluent produced by LPSCO.¹²⁶

10 **Q. DOES THAT CONCLUDE YOUR DIRECT TESTIMONY?**

11 **A. Yes.**

25 ¹²⁵ See the direct testimony of Thomas J. Bourassa in Docket No. WS-03478A-0454 at 18-19.

26 ¹²⁶ LPSCO has approximately two times the number of customers as Far West.

TJB-RB1
(Rate Base – Phase I)

1 of 2

Job Invoice

August 20, 2001

Yahweh Contracting LLC
7019 W. Georgia Ave.
Glendale, Az

To: LPSCO Water Co.

Address: 111 W. Wigwam Blvd.

Qty	Material	Unit	Amount
-----	----------	------	--------

205 Honeysuckle

\$15,000.00

New 2" water line to wigwam outlet - materials 5,000

5 new water services 1"

Backhoe, labor, sawcut, Materials, Truck, Tools \$10,000 - Ten working days

Insurance, Sales Tax

profit 4,000 = \$19,000

\$15,000

Remaining balance \$4000.00

PAYMENT
DATE 9-24-01
AMOUNT \$15,000
New Copper Services
for wigwam Business
Center
Total of 6
100-000-10770 19000
ACC. #

Work ordered by: Conde Sluga

Customer Approval: _____

Authorized Signature: _____

2 of 2

Job Invoice

August 27, 2001

Yahweh Contracting LLC
7019 W. Georgia Ave.
Glendale, Az

To: LPSCO Water Co.

Address: 111 W. Wigwam Blvd.

Qty	Material	Unit	Amount
	205 HONEYSUCKLE		\$4000.00

New 2" water line to wigwam outlet
5 new water services 1"
Backhoe, labor, sawcut, Materials, Truck, Tools

Insurance, Sales Tax

Remaining balance of job
\$4000.00

Work ordered by: Conde Sluga

Customer Approval: _____

Authorized Signature: _____

PAYMENT	
APPR BY <u>CS</u>	DATE: <u>9-24-01</u>
AMOUNT APPR. \$ <u>4,000</u>	
COMMENTS <u>New Copper Services</u> <u>for Wigwam Business</u>	
DISTRIBUTION <u>Enter Total of 6</u>	
ACC # _____	\$ _____
ACC # _____	\$ _____
ACC # _____	\$ _____



HUGHES SUPPLY INC.



3622 S. 30th STREET • PHOENIX, AZ 85040 • TEL (602) 268-8761 • FAX (602) 268-8975
18012 N. 32nd STREET • PHOENIX, AZ 85032 • TEL (602) 867-2040 • FAX (602) 867-4157
32 E. BASELINE RD. • MESA, AZ 85210 • TEL (480) 926-0979 • FAX (480) 926-3332
101 S. ALVERNON WAY • TUCSON, AZ 85714 • TEL (520) 745-0561 • FAX (520) 745-4566

HUGHES SUPPLY, INC.
P.O. Box 66970
Phoenix, Arizona 85082-6970

TURF IRRIGATION &
WATER WORKS SUPPLY
A Hughes Supply, Inc. Company

PAYMENT

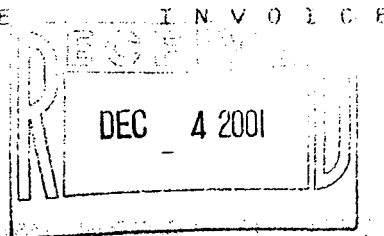
APPR BY AK DATE 11/3/01

AMOUNT APPR. \$ 14943.84

COMMENTS _____

DISTRIBUTION

LEACHFIELD PK \$ SRVC CO
LEACHFIELD RESERVE BOOSTER
1 1/2" HIGHWAY FLVD STE B
LEACHFIELD PK AZ 85340
ACC# _____



PAGE 1 OF 1
DATE 11/26/01
INVOICE NO. 868500
TAKEN BY JEFF

COUNTER BILLING

SHIP TO: DYSART & INDIAN SCHOOL
LPSCD RESERVOIR BOOSTER
CALL 1 DAY ADVANCE HAVE
NO FORKLIFT

9:35AM

NET 10TH

SHIP VIA/ROUTING: OUR TRUCK-GREG 623-935-9367

ORDER NO.	ORDER DATE	CUSTOMER NO.	CUSTOMER P.O. NO.	SLSMN	LOC
324672	10/23/01	5017001	0101-45	156	10

PART NUMBER	QTY	SHIP	BKO	DESCRIPTION	H/M	PRICE	U/M	AMOUNT
04CVGG-4800	3			MUELLER ULFM 12 FLG SWING CHECK	1708.00	EA		5124.00
03BVGGH-4800	3			BUTTERFLY VALVE 12 FLG EPOXY	695.00	EA		2085.00
				INTERIOR, TNEPEC (PRIMER)				
				EXTERIOR COATING, WITH				
				HANDWHEEL.				
08TEGG-4816	3			TEE 12x4 FLG	493.00	EA		1479.00
0890GG-4800	6			90 12" FLG	312.00	EA		1872.00
03PLVGG-1600	3			4" FLG PLUG VLV W/WRENCH NUT	223.00	EA		669.00
				EPOXY LINING 2 COATS INTERIOR &				
				PRIME 2 COATS EXTERIOR				
				MILLIKEN.				
09UD-4800	6			UNIFLANGE >DIP 12 W/GSKT	78.00	EA		468.00
31GGF8-1600	6			FLANGE GASKET 4 PF 1/8" RUBBER	2.64	EA		15.84
36JZ324148	3			ECN REDUCER FLG 12X10 DI SIGMA	385.00	EA		1155.00
36JZ324148A	3			VAL-MATIC AIR/VACUUM VM-104	585.00	EA		1755.00
36JZ324148B	3			ROMAC 202S 12X2 NPT TAPPING SGL	93.00	EA		279.00

INVOICE AMOUNT

14943.84

14943.84
3

100-000-1160-00
14943.84

Mech Equipment
For Town well Rehab

SIGNATURE _____

FILE COPY

PRINT NAME: _____

WEIGHT 5.084 LBS.

LEASE INITIAL ONE OF THE FOLLOWING BOXES:

Customer Checked Order ☐

Customer Refused to
Check Order ☐

TERMS & CONDITIONS OF SALE: By acceptance of goods, buyer agrees to the following terms and conditions of sale. Payment terms are as noted above. Past balances will be subject to service charges of 1 1/2% per month (18% per annum). Accounts with balances owed in excess of 60 days or which have exceeded established credit limit may be placed on credit hold. If payment is not made when due, buyer agrees to pay all actual costs of collection, including all attorney collection fees incurred by Turf Irrigation & Water Works. Returned merchandise will not be accepted without prior approval of Turf Irrigation & Water Works. Supply. A minimum 15% restocking charge will be made on accepted returned items. SPECIAL ORDER merchandise is not returnable and not cancellable. Turf Irrigation & Water Works personnel may, as a convenience to buyer, assist in loading material onto buyer's vehicle or equipment; however, buyer agrees

11/06/02

15:07

PINN-WEST TRANS OPS → 6239351020

NO. 478

D02

SEE WHAT
COURTESY
CAN DO

1233 East Camelback Road
P.O. Box 7709
Phoenix, Arizona 85011-7709
Telephone (602) 279-3232
www.houseofcourtesy.com

PAY FROM THIS
INVOICE

SOLD TO

LITCHFIELD PARK SERVICE COMPANY
111 W WIGWAM BLVD SUITE B
LITCHFIELD, ARIZ 85340

DATE 08/13/02

YOUR ORDER NO. 08328

STOCK NO. 025425

INVOICE NO. 711118

CONTROL NO. 711118

TERMS NET 30

INVOICE

VIN: 1GCCS14W228263042

2002 CHEVROLET S10 PICKUP

INVOICE:
SALES TAX:
TIRE TAX:
DOC FEE:
LICENSE FEE:
REBATE/CASH OWN:

16,164.53

5.00

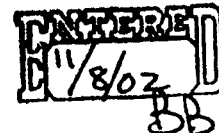
305.93

1,250.00

15,225.46

08328
Litchfield Park
J. Gluck

PAYMENT AUTHORIZATION	
APPROVAL	<i>[Signature]</i>
DATE	11-8-02
AMOUNT TO PAY	15,225.16
CODING	Trucks
TOTAL DUE	15,225.46
100-000-1022-00	15,225.46
THANK YOU	



THE HOUSE OF COURTESY SINCE 1955

TJB-RB2
(Rate Base – Phase I)

System: 11/10/09 10:59:21 AM
User Date: 11/10/09

CARBETROL Corporation
DOCUMENT INQUIRY REPORT
Sales Order Processing

Page: 1
User ID: Kellie

Ranges:	From:	To:
Document Number	28331	28331
Customer ID	First	Last
Document Date	First	Last
Batch ID	First	Last
Document Type	First	Last
Master Number	First	Last

Sorted By: Document Number/Document Type Include: History

* Voided

Customer ID	Document Number	Type	Type ID	Date	Batch ID	Subtotal	Customer PO Number
Customer Name		Master No.		Trade Discount	Freight Miscellaneous	Tax	Total
92647-1	28331	ORD	STDORD	1/10/02	INV03/11/02	\$36,125.00	31-KMT1181
Pacific Environmental Resource		3,658		\$0.00	\$2,125.00	\$0.00	\$38,250.00

Total Documents: 1

TJB-RB3
(Rate Base – Phase I)

LITCHFIELD PARK SERVICE COMPANY
SEWER DIVISION
DOCKET NO. WS-0428A-01-0487 & W-01427A-01-0487

SURREBUTTAL
SCHEDULE RDN-3

ORIGINAL COST RATE BASE

LINE NO	DESCRIPTION	ORIGINAL COST			
		[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] REF	STAFF AS ADJUSTED
1	Gross Utility Plant in Service	\$ 9,110,164	3,300,241	1,2	\$ 12,410,405
2	Less:				
3	Accumulated Depreciation	758,143	622,885	3	1,381,028
4	Net Utility Plant in Service	8,352,021	\$ 2,677,356		\$ 11,029,377
	Less:				
5	Contribution In Aid of Construction	0	2,070,191		2,070,191
6	Less Amortization of CIAC	0	488,918		488,918
7	Net CIAC	0	1,581,273		1,581,273
	Less:				
8	Advances In Aid of Construction	0	0		0
9	Deferred Income Taxes	353,513			353,513
10	Total Deductions	353,513	1,581,273		1,934,786
	Plus:				
11	CWIP	1,230,049	(1,230,049)	4	0
12	Allowance for Working Capital	84,968	(2,187)	5	82,781
13	Total Rate Base	\$ 9,313,525	\$ (136,153)		\$ 9,177,372

**BOURASSA REBUTTAL
WATER SCHEDULES
(Rate Base – Phase I)**

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Computation of Increase in Gross Revenue
Requirements As Adjusted

Exhibit
Rebuttal Schedule A-1
Page 1
Witness: Bourassa

Line

No.

1	Fair Value Rate Base	\$	37,502,569
2			
3	Adjusted Operating Income		(24,837)
4			
5	Current Rate of Return		-0.07%
6			
7	Required Operating Income	\$	4,125,283
8			
9	Required Rate of Return on Fair Value Rate Base		11.00%
10			
11	Operating Income Deficiency	\$	4,150,119
12			
13	Gross Revenue Conversion Factor		1.6286
14			
15	Increase in Gross Revenue Revenue Requirement		6,759,028
16			
17	Adjusted Test Year Revenues	\$	6,878,709
18	Increase in Gross Revenue Revenue Requirement	\$	6,759,028
19	Proposed Revenue Requirement	\$	13,637,738
20	% Increase		98.26%

			<u>Present</u>	<u>Proposed</u>	<u>Dollar</u>	<u>Percent</u>
	<u>Customer</u>		<u>Rates</u>	<u>Rates</u>	<u>Increase</u>	<u>Increase</u>
	<u>Classification</u>					
24	5/8 Inch Residential	\$	7,929	\$ 12,382	\$ 4,453	56.16%
25	3/4 Inch Residential		2,023,567	4,687,168	2,663,601	131.63%
26	1 Inch Residential		1,986,898	4,526,700	2,539,802	127.83%
27	1.5 Inch Residential		54,252	96,290	42,038	77.49%
28	2 Inch Residential		159,078	234,227	75,149	47.24%
29	4 Inch Residential		19,356	32,030	12,675	65.48%
30	Subtotal	\$	4,251,079	\$ 9,588,796	\$ 5,337,717	125.56%
31						
32	5/8 Inch Commercial	\$	24,344	\$ 40,954	\$ 16,610	68.23%
33	3/4 Inch Commercial		12,320	30,065	17,745	144.04%
34	1 Inch Commercial		31,023	71,401	40,379	130.16%
35	1.5 Inch Commercial		64,158	113,680	49,522	77.19%
36	2 Inch Commercial		394,253	586,940	192,688	48.87%
37	4 Inch Commercial		64,990	108,554	43,564	67.03%
38	8 Inch Commercial		17,579	31,839	14,260	81.12%
39	10 Inch Commercial		-	-	-	0.00%
40	Subtotal	\$	608,665	\$ 983,433	\$ 374,768	61.57%
41						0.00%
42	5/8 Inch Irrigation	\$	36,970	\$ 82,378	\$ 45,407	
43	3/4 Inch Irrigation		151,173	310,186	159,013	105.19%
44	1 Inch Irrigation		148,413	262,651	114,238	76.97%
45	1.5 Inch Irrigation		908,626	1,504,279	595,653	65.56%
46	2 Inch Irrigation		104,340	180,169	75,829	72.67%
47	4 Inch Irrigation		-	-	-	0.00%
48	Subtotal	\$	1,349,523	\$ 2,339,663	\$ 990,140	73.37%
49						
50	Hydrant	\$	403,707	\$ 455,597	\$ 51,891	12.85%
51	Subtotal Revenues before Annualization	\$	6,612,974	\$ 13,367,490	\$ 6,754,516	102.14%
52	Revenue Annualization					0.00%
53	Miscellaneous Revenues		6,878,710	13,637,737	6,759,028	98.26%
54	Reconciling Amount H-1 to C-1		-	-	-	0.00%
55	Total of Water Revenues (a)	\$	13,491,684	\$ 27,005,227	\$ 6,754,516	50.06%

SUPPORTING SCHEDULES:

- 58 Rebuttal B-1
- 59 Rebuttal C-1
- 60 Rebuttal C-3
- 61 Rebuttal H-1

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Summary of Rate Base

Exhibit
Rebuttal Schedule B-1
Page 1
Witness: Bourassa

Line No.		Original Cost Rate base	Fair Value Rate Base
1			
2	Gross Utility Plant in Service	\$ 73,705,658	\$ 73,705,658
3	Less: Accumulated Depreciation	9,027,020	9,027,020
4			
5	Net Utility Plant in Service	\$ 64,678,638	\$ 64,678,638
6			
7	<u>Less:</u>		
8	Advances in Aid of		
9	Construction	22,336,975	22,336,975
10	Contributions in Aid of		
11	Construction	3,096,180	3,096,180
12			
13	Accumulated Amortization of CIAC	(860,706)	(860,706)
14			
15	Customer Meter Deposits	2,238,022	2,238,022
16	Deferred Income Taxes & Credits	448,160	448,160
17			
18			
19			
20	<u>Plus:</u>		
21	Unamortized Debt Issuance		
22	Costs	-	-
23	Deferred Reg. Assets	82,561	82,561
24	Working capital	-	-
25			
26			
27			
28			
29	Total Rate Base	\$ 37,502,569	\$ 37,502,569
30			
31			
32			
33	<u>SUPPORTING SCHEDULES:</u>		<u>RECAP SCHEDULES:</u>
34	Rebuttal B-2		Rebuttal A-1
35	Rebuttal B-3		
36	Rebuttal B-5		
37			
38			

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments

Exhibit
Rebuttal Schedule B-2
Page 1
Witness: Bourassa

Line No.		Actual at End of Test Year	Proforma Adjustment Amount	Adjusted at end of Test Year
1	Gross Utility			
2	Plant in Service	\$ 73,731,815	(26,157)	\$ 73,705,658
3				
4	Less:			
5	Accumulated			
6	Depreciation	9,107,141	(80,121)	9,027,020
7				
8				
9	Net Utility Plant			
10	in Service	\$ 64,624,674		\$ 64,678,638
11				
12	Less:			
13	Advances in Aid of			
14	Construction	24,583,673	(2,246,699)	22,336,975
15				
16	Contributions in Aid of			
17	Construction	3,104,068	(7,888)	3,096,180
18				
19	Accumulated Amort of CIAC	(860,706)	-	(860,706)
20				
21	Customer Meter Deposits	68,685	2,169,337	2,238,022
22	Deferred Income Taxes & Credits	21,451	426,709	448,160
23				
24				
25				
26	Plus:			
27	Unamortized Debt Issuance			
28	Costs	134,528	(134,528)	-
29	Deferred Reg. Assets	82,561	-	82,561
30	Working capital	-	-	-
31				
32				
33				
34				
35	Total	<u>\$ 37,924,592</u>		<u>\$ 37,502,569</u>

SUPPORTING SCHEDULES:
Rebuttal B-2, page 2

RECAP SCHEDULES:
Rebuttal B-1

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments

Exhibit
Rebuttal Schedule B-2
Page 2
Witness: Bourassa

Line No.		Adjusted at end of Test Year	1	2	3	Proforma Adjustments			Remove Security Deposit	Debt of Test Year	Rebuttal Adjusted at end of Test Year
						4	5	6			
	Gross Utility Plant in Service	\$ 73,731,815	(26,157)								\$ 73,705,658
	Less:										
	Accumulated Depreciation	9,107,141		(80,121)							9,027,020
	Net Utility Plant in Service	\$ 64,624,674	\$ (26,157)	\$ 80,121	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 64,678,638
	Less:										
	Advances in Aid of Construction	24,583,673				(8,677)	(2,238,022)				22,336,975
	Contributions in Aid of Construction (CIAC)	3,104,068				(7,888)					3,096,180
	Accumulated Amort of CIAC	(860,706)									(860,706)
	Customer Meter Deposits	68,685									2,238,022
	Deferred Income Taxes & Credits	21,451			426,709		\$ 2,238,022	(68,685)			448,160
	Plus:										
	Unamortized Finance Charges	134,528							(134,528)		-
	Deferred Reg. Assets	82,561									82,561
	Allowance for Working Capital	-									-
	Total	\$ 37,924,592	\$ (26,157)	\$ 80,121	\$ (426,709)	\$ 16,565	\$ -	\$ 68,685	\$ (134,528)	\$ -	\$ 37,502,569

SUPPORTING SCHEDULES:
Rebuttal B-2, pages 3-6

RECAP SCHEDULES:
Rebuttal B-2, page 1

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1- B

Exhibit
Rebuttal Schedule B-2
Page 3.1
Witness: Bourassa

Line

No.

1	<u>Post Test Year Plant</u>	
2		
3	Post Test Year Plant per Rebuttal	\$ 1,885,770
4		
5	Post Test Year Plant per Direct	<u>\$ 1,866,965</u>
6		
7	Increase (Decrease) in Plant-in-Service	<u>\$ 18,805</u>
8		
9		
10	Account 320.1 - Water Treatment Equipment	<u>\$ 18,805</u>
11		
12		
13	See Staff Adjustment 2 Schedule JMM-W5	
14		
15		
16		

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1- B

Exhibit
Rebuttal Schedule B-2
Page 3.2
Witness: Bourassa

Line

No.

1	<u>Plant Retirements</u>	
2		
3	304 - Structures and Improvements	\$ (41,971)
4	311 - Electric Pumping Equipment	(31,158)
5	339 - Other Plant and Miscellaneous Equipment	<u>(5,750)</u>
6		
7	Increase (Decrease) in Plant-in-Service	<u>\$ (78,879)</u>
8		
9		
10	For related AIAC and CIAC see Rebuttal Schedule B-2, page 6	
11		
12		
13		
14		
15	See Staff Adjustment 1 Schedule JMM-W6 (from Exhibit MSJ Table H-1)	

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1 - C

Exhibit
Rebuttal Schedule B-2
Page 3.3
Witness: Bourassa

Line

No.

1	<u>Capitalized Expenses</u>	
2		
3	307 - Wells and Springs - Hydro Controls and Pump Systems (clocks for wells)	\$ 1,114
4	307 - Wells and Springs - Southwest Grd Wtr Consult. (well spacing evaluation)	1,380
5	307 - Wells and Springs - Southwest Grd Wtr Consult. (well impact analysis)	4,823
6	307 - Wells and Springs - Southwest Grd Wtr Consult. (well rehabilitation)	<u>4,072</u>
7	Total For 307 - Wells and Springs	\$ 11,389
8		
9	331 - Distribution Mains - Narasimhan Consulting Services (Dist. Sys. Eval.)	<u>8,600</u>
10		
11	Total Capitalized Expenses	<u>\$ 19,989</u>
12		
13		
14	See Testimony	

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1 - D

Exhibit
Rebuttal Schedule B-2
Page 3.4
Witness: Bourassa

Line
No.

1 Remove Office Rent

2

3 307 - Wells and Springs - Suncor Development Company (2002)

\$ (7,072)

4

5

6

7

8

9

10

11

12

13

14 See Testimony

Litchfield Park Service Company - Water Division
Plant Additions and Retirements

Exhibit
Rebuttal Schedule B-2
Page 3.5

Account	No.	Description	Deprec. Rate Before Nov-02	Deprec. Rate After Nov-02	Plant At 12/31/2000	2000 Accum. Depr.	2001 Plant Additions	2001 Plant Adjustments	2001 Adjusted Plant Additions	2001 Plant Retirements	2001 Salvage A/D Only	2001 Plant Balance	2001 Deprec.
301		Organization Cost	0.00%	0.00%	21,100	-	-	-	-	-	-	21,100	-
302		Franchise Cost	0.00%	0.00%	-	-	-	-	-	-	-	-	-
303		Land and Land Rights	0.00%	0.00%	671,103	-	-	-	-	-	-	671,103	-
304		Structures and Improvements	2.62%	3.33%	114,008	48,698	3,441	-	3,441	-	-	117,449	3,032
305		Collecting and Impounding Res.	2.62%	2.50%	-	-	-	-	-	-	-	-	-
306		Lake River and Other Intakes	2.62%	2.50%	-	-	-	-	-	-	-	-	-
307		Wells and Springs	2.62%	3.33%	613,250	173,809	930,425	-	930,425	-	-	1,543,674	28,256
308		Infiltration Galleries and Tunnels	2.62%	6.87%	-	-	-	-	-	-	-	-	-
309		Supply Mains	2.62%	2.00%	-	-	-	-	-	-	-	-	-
310		Power Generation Equipment	2.62%	5.00%	69,151	-	71,728	-	71,728	-	-	140,878	2,751
311		Electric Pumping Equipment	2.62%	12.50%	420,594	94,255	35,008	-	35,008	-	-	455,602	11,478
320		Water Treatment Equipment	2.62%	3.33%	82,310	(15,404)	70,887	-	70,887	-	-	153,197	3,085
320.1		Water Treatment Equipment	2.62%	3.33%	-	-	-	-	-	-	-	-	-
320.2		Chemical Solution Feeders	2.62%	20.00%	-	-	-	-	-	-	-	-	-
330		Distribution Reservoirs & Standpipe	2.62%	2.22%	278,676	111,824	2,531	-	2,531	-	-	281,207	7,334
330.1		Storage tanks	2.62%	2.22%	-	-	-	-	-	-	-	-	-
330.2		Pressure Tanks	2.62%	5.00%	-	-	-	-	-	-	-	-	-
331		Transmission and Distribution Mains	2.62%	2.00%	4,855,257	1,068,157	1,337,228	-	1,337,228	-	-	6,192,485	144,725
333		Services	2.62%	3.33%	1,907,362	241,423	182,991	-	182,991	-	-	2,090,352	52,370
334		Meters	2.62%	8.33%	1,261,241	301,075	174,224	-	174,224	-	-	1,435,466	35,327
335		Hydrants	2.62%	2.00%	322,184	(23,090)	67,203	-	67,203	-	-	389,386	9,322
336		Backflow Prevention Devices	2.62%	6.67%	8,426	298	-	-	-	-	-	8,426	221
339		Other Plant and Miscellaneous Equipment	2.62%	6.67%	-	-	-	-	-	-	-	-	-
340		Office Furniture and Fixtures	2.62%	6.67%	100,842	8,854	7,827	-	7,827	-	-	108,669	2,745
340.1		Computers and Software	2.62%	20.00%	-	-	-	-	-	-	-	-	-
341		Transportation Equipment	2.62%	20.00%	901	35	600	-	600	-	-	1,501	31
342		Stores Equipment	2.62%	4.00%	-	-	-	-	-	-	-	-	-
343		Tools and Work Equipment	2.62%	5.00%	6,757	1,669	2,586	-	2,586	-	-	9,343	211
344		Laboratory Equipment	2.62%	10.00%	-	-	-	-	-	-	-	-	-
345		Power Operated Equipment	2.62%	5.00%	-	4,665	-	-	-	-	-	-	(4,665)
346		Communications Equipment	2.62%	10.00%	-	-	-	-	-	-	-	-	-
347		Miscellaneous Equipment	2.62%	10.00%	-	-	12,285	-	12,285	-	-	12,285	161
348		Other Tangible Plant	2.62%	10.00%	-	-	-	-	-	-	-	-	-
		Rounding			-	-	-	-	-	-	-	-	-
Plant Held for Future Use													-
TOTAL WATER PLANT													13,632,123
						2,016,268	2,898,961	-	2,898,961	-	-	296,384	

(See page 3.15) (See page 3.16)

Litchfield Park Service Company - Water Division
Plant Additions and Retirements

Exhibit
Rebuttal Schedule B-2
Page 3.6

Account	No.	Description	Deprec. Rate Before Nov-02	Deprec. Rate After Nov-02	2002 Plant Additions	2002 Plant Adjustments	2002 Adjusted Plant Additions	2002 Plant Retirements	2002 Salvage/Adj. A/D Only	2002 Plant Balance	2002 Deprec.
	301	Organization Cost	0.00%	0.00%	112	-	112	-	-	21,212	-
	302	Franchise Cost	0.00%	0.00%	-	-	-	-	-	-	-
	303	Land and Land Rights	0.00%	0.00%	-	-	-	-	-	671,103	-
	304	Structures and Improvements	2.62%	3.33%	28,361	(7,072)	21,289	-	-	138,738	3,432
	305	Collecting and Impounding Res.	2.62%	2.50%	-	-	-	-	-	-	-
	306	Lake River and Other Intakes	2.62%	2.50%	-	-	-	-	-	-	-
	307	Wells and Springs	2.62%	3.33%	292,355	-	292,355	-	-	1,836,030	45,274
	308	Infiltration Galleries and Tunnels	2.62%	6.67%	-	-	-	-	-	-	-
	309	Supply Mains	2.62%	2.00%	-	-	-	-	-	-	-
	310	Power Generation Equipment	2.62%	5.00%	-	-	-	-	-	140,878	3,970
	311	Electric Pumping Equipment	2.62%	12.50%	84,962	-	84,962	-	-	540,564	17,151
	320	Water Treatment Equipment	2.62%	3.33%	20,920	-	20,920	-	-	174,117	4,365
	320.1	Water Treatment Equipment	2.62%	3.33%	-	-	-	-	-	-	-
	320.2	Chemical Solution Feeders	2.62%	20.00%	-	-	-	-	-	-	-
	330	Distribution Reservoirs & Standpipe	2.62%	2.22%	3,598	-	3,598	-	-	284,805	7,320
	330.1	Storage tanks	2.62%	2.22%	-	-	-	-	-	-	-
	330.2	Pressure Tanks	2.62%	2.22%	-	-	-	-	-	-	-
	331	Transmission and Distribution Mains	2.62%	5.00%	4,182,326	-	4,182,326	-	-	10,374,811	212,752
	333	Services	2.62%	3.33%	405,108	-	405,108	-	-	2,495,460	61,431
	334	Meters	2.62%	8.33%	532,234	-	532,234	-	-	1,967,699	52,678
	335	Hydrants	2.62%	2.00%	344,649	-	344,649	-	-	734,036	14,427
	336	Backflow Prevention Devices	2.62%	6.67%	2,607	-	2,607	-	-	11,034	288
	339	Other Plant and Miscellaneous Equipment	2.62%	6.67%	-	-	-	-	-	-	-
	340	Office Furniture and Fixtures	2.62%	6.67%	22,237	-	22,237	-	-	130,906	3,543
	340.1	Computers and Software	2.62%	20.00%	-	-	-	-	-	-	-
	341	Transportation Equipment	2.62%	20.00%	44,164	-	44,164	-	-	45,665	959
	342	Stores Equipment	2.62%	4.00%	-	-	-	-	-	-	-
	343	Tools and Work Equipment	2.62%	5.00%	952	-	952	-	-	10,285	277
	344	Laboratory Equipment	2.62%	10.00%	-	-	-	-	-	-	-
	345	Power Operated Equipment	2.62%	5.00%	-	-	-	-	-	-	-
	346	Communications Equipment	2.62%	10.00%	1,476	-	1,476	-	-	13,761	421
	347	Miscellaneous Equipment	2.62%	10.00%	-	-	-	-	-	-	-
	348	Other Tangible Plant	2.62%	10.00%	-	-	-	-	-	-	-
		Rounding			-	-	-	-	-	-	-
Plant Held for Future Use											
TOTAL WATER PLANT											
					5,966,062	(7,072)	5,958,990	-	-	19,591,113	428,307

Litchfield Park Service Company - Water Division
Plant Additions and Retirements

Exhibit
Rebuttal Schedule B-2
Page 3.7

Account	No.	Description	Deprec. Rate Before Nov-02	Deprec. Rate After Nov-02	2003 Plant Additions	2003 Plant Adjustments ¹	2003 Plant Adjustments	2003 Plant Adjustments	2003 Adjusted Plant Additions	2003 Plant Retirements	2003 Salvage A/D Only	2003 Plant Balance	2003 Deprec.
301		Organization Cost	0.00%	0.00%	(112)	-	-	(112)	-	-	-	21,100	-
302		Franchise Cost	0.00%	0.00%	-	-	-	-	-	-	-	-	-
303		Land and Land Rights	0.00%	0.00%	-	-	-	-	-	-	-	671,103	-
304		Structures and Improvements	2.62%	3.33%	66,270	-	-	66,270	-	-	-	205,007	5,723
305		Collecting and Impounding Res.	2.62%	2.50%	-	-	-	-	-	-	-	-	-
306		Lake River and Other Intakes	2.62%	2.50%	-	-	-	-	-	-	-	-	-
307		Wells and Springs	2.62%	3.33%	116,073	-	-	116,073	-	-	-	1,952,103	63,072
308		Infiltration Galleries and Tunnels	2.62%	6.67%	-	-	-	-	-	-	-	-	-
309		Supply Mains	2.62%	2.00%	-	-	-	-	-	-	-	-	-
310		Power Generation Equipment	2.62%	5.00%	-	-	-	-	-	-	-	140,878	7,044
311		Electric Pumping Equipment	2.62%	12.50%	11,570	-	2	11,572	-	-	-	552,136	68,294
320		Water Treatment Equipment	2.62%	3.33%	1,327	-	-	1,327	-	-	-	175,443	5,820
320.1		Water Treatment Equipment	2.62%	3.33%	-	-	-	-	-	-	-	-	-
320.2		Chemical Solution Feeders	2.62%	20.00%	-	-	-	-	-	-	-	-	-
330		Distribution Reservoirs & Standpipe	2.62%	2.22%	2,587	-	-	2,587	-	-	-	287,392	6,351
330.1		Storage tanks	2.62%	2.22%	-	-	-	-	-	-	-	-	-
330.2		Pressure Tanks	2.62%	5.00%	-	-	-	-	-	-	-	-	-
331		Transmission and Distribution Mains	2.62%	2.00%	16,417	-	625,134	-	645,552	-	-	11,020,363	213,952
333		Services	2.62%	3.33%	9,323	-	-	9,323	-	(6,100)	-	2,498,683	83,152
334		Meters	2.62%	8.33%	502,539	-	61,481	-	564,019	-	-	2,631,718	187,401
335		Hydrants	2.62%	2.00%	6,971	-	586,662	-	593,633	-	-	1,327,668	20,617
336		Backflow Prevention Devices	2.62%	6.67%	2,865	-	-	2,865	-	-	-	13,898	831
339		Other Plant and Miscellaneous Equipment	2.62%	6.67%	-	-	-	-	-	-	-	-	-
340		Office Furniture and Fixtures	2.62%	6.67%	18,299	-	-	18,299	-	-	-	149,205	9,342
340.1		Computers and Software	2.62%	20.00%	-	-	-	-	-	-	-	-	-
341		Transportation Equipment	2.62%	20.00%	-	-	-	-	-	-	-	45,665	9,133
342		Stores Equipment	2.62%	4.00%	-	-	-	-	6,398	-	-	16,693	675
343		Tools and Work Equipment	2.62%	5.00%	6,398	-	-	-	-	-	-	-	-
344		Laboratory Equipment	2.62%	10.00%	-	-	-	-	-	-	-	-	-
345		Power Operated Equipment	2.62%	5.00%	-	-	-	-	-	-	-	-	-
346		Communications Equipment	2.62%	10.00%	13,763	-	-	13,763	-	-	-	27,524	2,064
347		Miscellaneous Equipment	2.62%	10.00%	-	-	-	-	-	-	-	-	-
348		Other Tangible Plant	2.62%	10.00%	-	-	-	-	-	-	-	-	-
		Rounding			-	-	-	-	-	-	-	-	-
Plant Held for Future Use													
TOTAL WATER PLANT					774,289	-	1,277,279	-	2,051,568	(6,100)	-	21,636,581	683,472

¹ Affiliate Profit

Litchfield Park Service Company - Water Division
Plant Additions and Retirements

Exhibit
Rebuttal Schedule B-2
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Account No.	Description	Deprec. Rate Before Nov-02	Deprec. Rate After Nov-02	2004 Plant Additions	2004 Plant Adjustments ¹	2004 Adjusted Plant	2004 Plant Retirements	2004 Salvage A/D Only	2004 Plant Balance	2004 Deprec.
301	Organization Cost	0.00%	0.00%	-	-	-	-	-	21,100	-
302	Franchise Cost	0.00%	0.00%	-	-	-	-	-	-	-
303	Land and Land Rights	0.00%	0.00%	-	-	-	-	-	671,103	-
304	Structures and Improvements	2.62%	3.33%	334,449	(602)	333,848	-	-	538,855	12,385
305	Collecting and Impounding Res.	2.62%	2.50%	-	-	-	-	-	-	-
306	Lake River and Other Intakes	2.62%	2.50%	-	-	-	-	-	-	-
307	Wells and Springs	2.62%	3.33%	4,160	-	4,160	-	-	1,956,263	65,074
308	Infiltration Galleries and Tunnels	2.62%	6.67%	-	-	-	-	-	-	-
309	Supply Mains	2.62%	2.00%	-	-	-	-	-	-	-
310	Power Generation Equipment	2.62%	5.00%	35,614	-	35,614	-	-	176,493	7,934
311	Electric Pumping Equipment	2.62%	12.50%	71,154	(199)	70,955	-	-	623,091	73,452
320	Water Treatment Equipment	2.62%	3.33%	-	-	-	-	-	175,443	5,842
320.1	Water Treatment Equipment	2.62%	3.33%	-	-	-	-	-	-	-
320.2	Chemical Solution Feeders	2.62%	20.00%	-	-	-	-	-	-	-
330	Distribution Reservoirs & Standpipe	2.62%	2.22%	117,773	-	117,773	-	-	405,165	7,687
330.1	Storage tanks	2.62%	2.22%	-	-	-	-	-	-	-
330.2	Pressure Tanks	2.62%	5.00%	-	-	-	-	-	-	-
331	Transmission and Distribution Mains	2.62%	2.00%	8,813,416	-	8,813,416	-	-	19,833,779	308,541
333	Services	2.62%	3.33%	160,033	(4,734)	155,299	-	-	2,653,982	85,792
334	Meters	2.62%	8.33%	304,200	(280)	303,920	-	-	2,835,638	223,550
335	Hydrants	2.62%	2.00%	389	(511)	-	(122)	-	1,327,547	26,552
336	Backflow Prevention Devices	2.62%	6.67%	-	-	-	-	-	13,898	927
339	Other Plant and Miscellaneous Equipment	2.62%	6.67%	8,226	-	8,226	-	-	8,226	274
340	Office Furniture and Fixtures	2.62%	20.00%	110,448	-	110,448	-	-	259,653	13,635
340.1	Computers and Software	2.62%	20.00%	-	-	-	-	-	-	-
341	Transportation Equipment	2.62%	20.00%	28,224	-	28,224	-	-	73,889	11,955
342	Stores Equipment	2.62%	4.00%	-	-	-	-	-	-	-
343	Tools and Work Equipment	2.62%	5.00%	647	-	647	-	-	17,340	851
344	Laboratory Equipment	2.62%	10.00%	-	-	-	-	-	-	-
345	Power Operated Equipment	2.62%	5.00%	-	-	-	-	-	-	-
346	Communications Equipment	2.62%	10.00%	6,715	-	6,715	-	-	34,239	3,088
347	Miscellaneous Equipment	2.62%	10.00%	-	-	-	-	-	-	-
348	Other Tangible Plant	2.62%	10.00%	-	-	-	-	-	-	-
	Rounding			-	-	-	-	-	-	-

Plant Held for Future Use
TOTAL WATER PLANT

9,995,449	(6,326)	9,989,123	-	31,625,704	847,542
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¹ Affiliate Profit

Litchfield Park Service Company - Water Division
Plant Additions and Retirements

Exhibit
Rebuttal Schedule B-2
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Account No.	Description	Deprec. Rate Before Nov-02	Deprec. Rate After Nov-02	2005 Plant Additions	2005 Plant Adjustments ¹	2005 Adjusted Additions	2005 Plant Retirements	2005 Salvage A/D Only	2005 Plant Balance	2005 Deprec.
301	Organization Cost	0.00%	0.00%	-	-	-	-	-	21,100	-
302	Franchise Cost	0.00%	0.00%	-	-	-	-	-	-	-
303	Land and Land Rights	0.00%	0.00%	-	-	-	-	-	671,103	-
304	Structures and Improvements	2.62%	3.33%	26,680	(28,165)	(1,484)	-	-	537,371	17,919
305	Collecting and Impounding Res.	2.62%	2.50%	-	-	-	-	-	-	-
306	Lake River and Other Intakes	2.62%	2.50%	-	-	-	-	-	-	-
307	Wells and Springs	2.62%	3.33%	16,313	(8,385)	7,927	-	-	1,964,190	65,276
308	Infiltration Galleries and Tunnels	2.62%	6.67%	-	-	-	-	-	-	-
309	Supply Mains	2.62%	2.00%	-	-	-	-	-	-	-
310	Power Generation Equipment	2.62%	5.00%	-	-	-	-	-	176,493	8,825
311	Electric Pumping Equipment	2.62%	12.50%	153,001	(8,399)	144,602	-	-	767,893	86,924
320	Water Treatment Equipment	2.62%	3.33%	13,064	(3,517)	9,567	-	-	185,010	6,002
320.1	Water Treatment Equipment	2.62%	3.33%	-	-	-	-	-	-	-
320.2	Chemical Solution Feeders	2.62%	20.00%	-	-	-	-	-	-	-
330	Distribution Reservoirs & Standpipe	2.62%	2.22%	-	-	-	-	-	405,165	8,995
330.1	Storage tanks	2.62%	2.22%	-	-	-	-	-	-	-
330.2	Pressure Tanks	2.62%	5.00%	-	-	-	-	-	-	-
331	Transmission and Distribution Mains	2.62%	2.00%	5,295,656	-	5,295,656	-	-	25,129,434	449,632
333	Services	2.62%	3.33%	50,131	(6,563)	43,568	-	-	2,697,550	89,103
334	Meters	2.62%	8.33%	544,240	(477)	543,763	-	-	3,379,401	258,856
335	Hydrants	2.62%	2.00%	14,198	(163)	14,036	-	-	1,341,582	26,691
336	Backflow Prevention Devices	2.62%	6.67%	-	-	-	-	-	13,898	927
339	Other Plant and Miscellaneous Equipment	2.62%	6.67%	147,612	-	147,612	-	-	155,839	5,472
340	Office Furniture and Fixtures	2.62%	2.918	2,918	-	2,918	-	-	262,571	17,416
340.1	Computers and Software	2.62%	20.00%	-	-	-	-	-	-	-
341	Transportation Equipment	2.62%	20.00%	(12,837)	-	(12,837)	-	-	61,052	13,494
342	Stores Equipment	2.62%	4.00%	-	-	-	-	-	-	-
343	Tools and Work Equipment	2.62%	5.00%	472	-	472	-	-	17,811	879
344	Laboratory Equipment	2.62%	10.00%	-	-	-	-	-	-	-
346	Power Operated Equipment	2.62%	5.00%	-	-	-	-	-	-	-
346	Communications Equipment	2.62%	10.00%	2,460	(1,394)	1,066	-	-	35,305	3,477
347	Miscellaneous Equipment	2.62%	10.00%	-	-	-	-	-	-	-
348	Other Tangible Plant	2.62%	10.00%	-	-	-	-	-	-	-
	Rounding			-	-	-	-	-	-	-
Plant Held for Future Use										
TOTAL WATER PLANT				6,253,927	(57,051)	6,196,865	-	-	37,822,569	1,059,887

¹ Affiliate Profit

Litchfield Park Service Company - Water Division
Plant Additions and Retirements

Exhibit
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Account No.	Description	Deprec. Rate Before Nov-02	Deprec. Rate After Nov-02	2006 Plant Additions	2006 Plant Adjustments ¹	2006 Adjusted Plant Additions	2006 Plant Retirements	2006 Salvage A/D Only	2006 Plant Balance	2006 Deprec.
301	Organization Cost	0.00%	0.00%	-	-	-	-	-	21,100	-
302	Franchise Cost	0.00%	0.00%	-	-	-	-	-	-	-
303	Land and Land Rights	0.00%	0.00%	-	-	-	-	-	671,103	-
304	Structures and Improvements	2.62%	3.33%	71,062	(22,752)	48,310	(1,350)	-	584,331	18,676
305	Collecting and Impounding Res.	2.62%	2.50%	-	-	-	-	-	-	-
306	Lake River and Other Intakes	2.62%	2.50%	-	-	-	-	-	-	-
307	Wells and Springs	2.62%	3.33%	52,928	-	52,928	-	-	2,017,118	66,289
308	Infiltration Galleries and Tunnels	2.62%	6.67%	-	-	-	-	-	-	-
309	Supply Mains	2.62%	2.00%	-	-	-	-	-	-	-
310	Power Generation Equipment	2.62%	5.00%	-	-	-	-	-	176,493	8,825
311	Electric Pumping Equipment	2.62%	12.50%	2,400	-	2,400	-	-	770,093	96,112
320	Water Treatment Equipment	2.62%	3.33%	-	(9,690)	(9,690)	-	-	175,320	5,999
320.1	Water Treatment Equipment	2.62%	3.33%	-	-	-	-	-	-	-
320.2	Chemical Solution Feeders	2.62%	20.00%	-	-	-	-	-	-	-
330	Distribution Reservoirs & Standpipe	2.62%	2.22%	-	(3,381)	(3,381)	-	-	401,784	8,957
330.1	Storage tanks	2.62%	2.22%	-	-	-	-	-	-	-
330.2	Pressure Tanks	2.62%	5.00%	-	-	-	-	-	-	-
331	Transmission and Distribution Mains	2.62%	2.00%	371,174	-	371,174	-	-	25,500,608	506,300
333	Services	2.62%	3.33%	141,273	(400)	140,872	-	-	2,838,422	92,174
334	Meters	2.62%	8.33%	394,851	(204)	394,647	-	-	3,774,049	297,941
335	Hydrants	2.62%	2.00%	50,673	-	50,673	-	-	1,392,255	27,338
336	Backflow Prevention Devices	2.62%	6.67%	-	-	-	-	-	13,898	927
339	Other Plant and Miscellaneous Equipment	2.62%	6.67%	9,059	-	9,059	-	-	164,897	10,697
340	Office Furniture and Fixtures	2.62%	20.00%	112,402	-	112,402	-	-	374,973	21,262
340.1	Computers and Software	2.62%	20.00%	-	-	-	-	-	-	-
341	Transportation Equipment	2.62%	20.00%	2,429	-	2,429	-	-	63,481	12,453
342	Stores Equipment	2.62%	4.00%	-	-	-	-	-	-	-
343	Tools and Work Equipment	2.62%	5.00%	-	-	-	-	-	17,811	891
344	Laboratory Equipment	2.62%	10.00%	-	-	-	-	-	-	-
346	Power Operated Equipment	2.62%	5.00%	-	-	-	-	-	-	-
346	Communications Equipment	2.62%	10.00%	-	(1,883)	(1,883)	-	-	33,422	3,436
347	Miscellaneous Equipment	2.62%	10.00%	-	-	-	-	-	-	-
348	Other Tangible Plant	2.62%	10.00%	-	-	-	-	-	-	-
	Rounding			-	-	-	-	-	-	-
Plant Held for Future Use				1,208,249	(38,310)	1,169,939	(1,350)	-	38,991,158	1,178,278
TOTAL WATER PLANT										

¹ Affiliate Profit

Litchfield Park Service Company - Water Division
Plant Additions and Retirements

Exhibit
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Account No.	Description	Deprec. Rate Before Nov-02	Deprec. Rate After Nov-02	2007 Plant Additions	2007 Plant Adjustments ¹	2007 Adjusted Plant Additions	2007 Plant Retirements	2007 Salvage A/D Only	2007 Plant Balance	2007 Deprec.
301	Organization Cost	0.00%	0.00%	-	-	-	-	-	21,100	-
302	Franchise Cost	0.00%	0.00%	-	-	-	-	-	-	-
303	Land and Land Rights	0.00%	0.00%	6,156	-	6,156	-	-	677,259	-
304	Structures and Improvements	2.62%	3.33%	211,023	(99,915)	111,107	-	-	695,438	21,308
305	Collecting and Impounding Res.	2.62%	2.50%	-	-	-	-	-	-	-
306	Lake River and Other Intakes	2.62%	2.50%	-	-	-	-	-	-	-
307	Wells and Springs	2.62%	3.33%	85,816	(166)	85,650	-	-	2,102,768	68,596
308	Infiltration Galleries and Tunnels	2.62%	6.67%	-	-	-	-	-	-	-
309	Supply Mains	2.62%	2.00%	-	-	-	-	-	-	-
310	Power Generation Equipment	2.62%	5.00%	25,777	-	25,777	-	-	202,269	9,469
311	Electric Pumping Equipment	2.62%	12.50%	43,188	-	43,188	-	-	813,281	98,961
320	Water Treatment Equipment	2.62%	3.33%	20,801	(2,049)	18,751	-	-	194,071	6,150
320.1	Water Treatment Equipment	2.62%	3.33%	-	-	-	-	-	-	-
320.2	Chemical Solution Feeders	2.62%	20.00%	-	-	-	-	-	-	-
330	Distribution Reservoirs & Standpipe	2.62%	2.22%	2,340	(969)	1,371	-	-	403,154	8,935
330.1	Storage tanks	2.62%	2.22%	-	-	-	-	-	-	-
330.2	Pressure Tanks	2.62%	2.22%	-	-	-	-	-	-	-
331	Transmission and Distribution Mains	2.62%	5.00%	1,282,512	-	1,282,512	-	-	26,783,120	522,837
333	Services	2.62%	3.33%	628,772	-	628,772	-	-	3,467,194	104,989
334	Meters	2.62%	8.33%	181,719	-	181,719	-	-	3,955,768	321,947
335	Hydrants	2.62%	2.00%	477,160	-	477,160	-	-	1,869,416	32,617
336	Backflow Prevention Devices	2.62%	6.67%	15,272	-	15,272	-	-	28,171	1,436
339	Other Plant and Miscellaneous Equipment	2.62%	6.67%	17,925	-	17,925	-	-	182,822	11,596
340	Office Furniture and Fixtures	2.62%	6.67%	-	-	-	-	-	374,973	25,011
340.1	Computers and Software	2.62%	20.00%	-	-	-	-	-	-	-
341	Transportation Equipment	2.62%	20.00%	24,302	-	24,302	-	-	87,783	15,126
342	Stores Equipment	2.62%	4.00%	31,711	-	31,711	-	-	31,711	634
343	Tools and Work Equipment	2.62%	5.00%	-	-	-	-	-	17,811	891
344	Laboratory Equipment	2.62%	10.00%	-	-	-	-	-	-	-
345	Power Operated Equipment	2.62%	5.00%	-	-	-	-	-	-	-
346	Communications Equipment	2.62%	10.00%	-	(28)	-	(28)	-	33,394	3,341
347	Miscellaneous Equipment	2.62%	10.00%	-	-	-	-	-	-	-
348	Other Tangible Plant	2.62%	10.00%	-	-	-	-	-	-	-
	Rounding			-	-	-	-	-	-	-
Plant Held for Future Use										
TOTAL WATER PLANT				3,054,474	(103,128)	2,951,346	-	-	41,942,503	1,253,844

¹ Affiliate Profit

Litchfield Park Service Company - Water Division
Plant Additions and Retirements

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Account No.	Description	Deprec. Rate Before Nov-02	Deprec. Rate After Nov-02	Jan. to Sep. 2008 Plant Additions	Jan. to Sep. 2008 Plant Adjustments ¹	Jan. to Sep. 2008 Capitalized Expenses	Jan. to Sep. 2008 Adjusted Plant Additions	Jan. to Sep. 2008 Plant Retirements	Jan. to Sep. 2008 Salvage (A/D Only)	Staff Plant Retirements	Jan. to Sep. 2008 Plant Balance	Jan. to Sep. 2008 Deprec.
301	Organization Cost	0.00%	0.00%	-	-	-	-	-	-	-	21,100	-
302	Franchise Cost	0.00%	0.00%	-	-	-	-	-	-	-	-	-
303	Land and Land Rights	0.00%	0.00%	607,337	-	-	607,337	-	-	-	1,284,595	-
304	Structures and Improvements	2.62%	3.33%	24,060,112	(64,328)	-	23,995,784	-	-	(41,971)	24,649,251	317,016
305	Collecting and Impounding Res.	2.62%	2.50%	-	-	-	-	-	-	-	-	-
306	Lake River and Other Intakes	2.62%	2.50%	-	-	-	-	-	-	-	-	-
307	Wells and Springs	2.62%	3.33%	281,259	(1,925)	11,389	290,723	-	-	-	2,393,491	56,147
308	Infiltration Galleries and Tunnels	2.62%	6.67%	-	-	-	-	-	-	-	-	-
309	Supply Mains	2.62%	2.00%	-	-	-	-	-	-	-	-	-
310	Power Generation Equipment	2.62%	5.00%	-	-	-	-	-	-	-	-	-
311	Electric Pumping Equipment	2.62%	12.50%	134,932	-	-	134,932	-	-	(31,158)	202,269	7,585
320	Water Treatment Equipment	2.62%	3.33%	1,150,701	(6,948)	-	1,143,753	-	-	-	917,055	82,570
320.1	Water Treatment Equipment	2.62%	3.33%	-	-	-	-	-	-	-	1,337,824	19,130
320.2	Chemical Solution Feeders	2.62%	20.00%	-	-	-	-	-	-	-	-	-
330	Distribution Reservoirs & Standpipe	2.62%	2.22%	27,600	(111)	-	27,489	-	-	-	430,644	6,941
330.1	Storage tanks	2.62%	2.22%	-	-	-	-	-	-	-	-	-
330.2	Pressure Tanks	2.62%	5.00%	-	-	-	-	-	-	-	-	-
331	Transmission and Distribution Mains	2.62%	2.00%	2,146,051	-	8,600	2,154,651	-	-	-	28,937,771	417,907
333	Services	2.62%	3.33%	783,007	(457)	-	782,550	-	-	-	4,249,744	96,365
334	Meters	2.62%	8.33%	182,984	-	-	182,984	-	-	-	4,138,752	252,853
335	Hydrants	2.62%	2.00%	186,383	(18)	-	186,365	-	-	-	2,055,781	29,439
336	Backflow Prevention Devices	2.62%	6.67%	9,217	-	-	9,217	-	-	-	36,387	1,690
339	Other Plant and Miscellaneous Equipment	2.62%	6.67%	82,459	-	-	82,459	-	-	(5,750)	259,531	11,208
340	Office Furniture and Fixtures	2.62%	6.67%	176,784	-	-	176,784	-	-	-	551,757	23,180
340.1	Computers and Software	2.62%	20.00%	-	-	-	-	-	-	-	-	-
341	Transportation Equipment	2.62%	20.00%	89,382	-	-	89,382	-	-	-	177,165	19,871
342	Stores Equipment	2.62%	4.00%	-	-	-	-	-	-	-	31,711	951
343	Tools and Work Equipment	2.62%	5.00%	5,539	-	-	5,539	-	-	-	23,350	772
344	Laboratory Equipment	2.62%	10.00%	-	-	-	-	-	-	-	-	-
345	Power Operated Equipment	2.62%	5.00%	-	-	-	-	-	-	-	-	-
346	Communications Equipment	2.62%	10.00%	87,102	(787)	-	86,316	-	-	-	119,710	5,741
347	Miscellaneous Equipment	2.62%	10.00%	-	-	-	-	-	-	-	-	-
348	Other Tangible Plant	2.62%	10.00%	-	-	-	-	-	-	-	-	-
	Rounding			-	-	-	-	-	-	-	-	-

Plant Held for Future Use
TOTAL WATER PLANT

30,010,848	(74,573)	19,989	29,956,264	-	-	71,819,888	1,349,366
						\$ 1,885,770	
						Total B-2 Plant	73,705,658

¹ Affiliate Profit

Litchfield Park Service Company - Water Division
Plant Additions and Retirements

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Account No.	Description	Deprec. Rate Before Nov-02	Deprec. Rate After Nov-02	Year End Accumulated Depreciation by Account							
				2000 2001 2002 2003 2004 2005							
				Nov-02	Nov-02	Nov-02	Nov-02	Nov-02	Nov-02	Nov-02	
301	Organization Cost	0.00%	0.00%	-	-	-	-	-	-	-	-
302	Franchise Cost	0.00%	0.00%	-	-	-	-	-	-	-	-
303	Land and Land Rights	0.00%	0.00%	-	-	-	-	-	-	-	-
304	Structures and Improvements	2.62%	3.33%	48,698	51,730	55,161	60,885	73,270	91,189	-	-
305	Collecting and Impounding Res.	2.62%	2.50%	-	-	-	-	-	-	-	-
306	Lake River and Other Intakes	2.62%	2.50%	-	-	-	-	-	-	-	-
307	Wells and Springs	2.62%	3.33%	173,809	202,065	247,339	310,411	375,486	440,761	-	-
308	Infiltration Galleries and Tunnels	2.62%	6.67%	-	-	-	-	-	-	-	-
309	Supply Mains	2.62%	2.00%	-	-	-	-	-	-	-	-
310	Power Generation Equipment	2.62%	5.00%	-	2,751	6,722	13,766	21,700	30,525	-	-
311	Electric Pumping Equipment	2.62%	12.50%	94,255	105,733	122,884	191,178	264,629	351,553	-	-
320	Water Treatment Equipment	2.62%	3.33%	(15,404)	(12,319)	(7,934)	(2,114)	3,728	9,730	-	-
320.1	Water Treatment Equipment	2.62%	3.33%	-	-	-	-	-	-	-	-
320.2	Chemical Solution Feeders	2.62%	20.00%	-	-	-	-	-	-	-	-
330	Distribution Reservoirs & Standpipe	2.62%	2.22%	111,824	119,158	126,479	132,830	140,517	149,512	-	-
330.1	Storage tanks	2.62%	2.22%	-	-	-	-	-	-	-	-
330.2	Pressure Tanks	2.62%	5.00%	-	-	-	-	-	-	-	-
331	Transmission and Distribution Mains	2.62%	2.00%	1,068,157	1,212,882	1,425,634	1,639,586	1,948,127	2,397,759	-	-
333	Services	2.62%	3.33%	241,423	293,793	355,224	432,276	518,068	607,171	-	-
334	Meters	2.62%	8.33%	301,075	336,402	389,080	576,481	800,031	1,058,888	-	-
335	Hydrants	2.62%	2.00%	(23,090)	(13,768)	659	21,276	47,828	74,519	-	-
336	Backflow Prevention Devices	2.62%	6.67%	299	519	807	1,539	2,566	3,493	-	-
339	Other Plant and Miscellaneous Equipment	2.62%	6.67%	-	-	-	-	274	5,746	-	-
340	Office Furniture and Fixtures	2.62%	6.67%	8,854	11,598	15,141	24,483	38,118	55,534	-	-
340.1	Computers and Software	2.62%	20.00%	-	-	-	-	-	-	-	-
341	Transportation Equipment	2.62%	20.00%	35	67	1,026	10,159	22,115	35,609	-	-
342	Stores Equipment	2.62%	4.00%	-	-	-	-	-	-	-	-
343	Tools and Work Equipment	2.62%	5.00%	1,669	1,879	2,156	2,831	3,682	4,560	-	-
344	Laboratory Equipment	2.62%	10.00%	-	-	-	-	-	-	-	-
345	Power Operated Equipment	2.62%	5.00%	4,665	-	-	-	-	-	-	-
346	Communications Equipment	2.62%	10.00%	-	161	582	2,646	5,735	9,212	-	-
347	Miscellaneous Equipment	2.62%	10.00%	-	-	-	-	-	-	-	-
348	Other Tangible Plant	2.62%	10.00%	-	-	-	-	-	-	-	-
	Rounding			-	-	-	-	-	-	-	-
Plant Held for Future Use				-	-	-	-	-	-	-	-
TOTAL WATER PLANT				2,016,268	2,312,652	2,740,959	3,418,332	4,265,874	5,325,761	-	-

Litchfield Park Service Company - Water Division
Plant Additions and Retirements

Exhibit
Rebuttal Schedule B-2
Page 3.14

Account	No.	Description	Deprec. Rate Before Nov-02	Deprec. Rate After Nov-02	Year End Accumulated Depreciation by Account		2008
					2006	2007	
301		Organization Cost	0.00%	0.00%	-	-	-
302		Franchise Cost	0.00%	0.00%	-	-	-
303		Land and Land Rights	0.00%	0.00%	-	-	-
304		Structures and Improvements	2.62%	3.33%	108,516	129,824	404,869
305		Collecting and Impounding Res.	2.62%	2.50%	-	-	-
306		Lake River and Other Intakes	2.62%	2.50%	-	-	-
307		Wells and Springs	2.62%	3.33%	507,050	575,646	631,793
308		Infiltration Galleries and Tunnels	2.62%	6.67%	-	-	-
309		Supply Mains	2.62%	2.00%	-	-	-
310		Power Generation Equipment	2.62%	5.00%	39,349	48,818	56,403
311		Electric Pumping Equipment	2.62%	12.50%	447,665	546,626	598,038
320		Water Treatment Equipment	2.62%	3.33%	15,729	21,879	41,009
320.1		Water Treatment Equipment	2.62%	3.33%	-	-	-
320.2		Chemical Solution Feeders	2.62%	20.00%	-	-	-
330		Distribution Reservoirs & Standpipe	2.62%	2.22%	158,469	167,404	174,345
330.1		Storage tanks	2.62%	2.22%	-	-	-
330.2		Pressure Tanks	2.62%	5.00%	-	-	-
331		Transmission and Distribution Mains	2.62%	2.00%	2,904,060	3,426,897	3,844,803
333		Services	2.62%	3.33%	689,345	804,334	900,699
334		Meters	2.62%	8.33%	1,356,829	1,678,776	1,931,628
335		Hydrants	2.62%	2.00%	101,857	134,474	163,813
336		Backflow Prevention Devices	2.62%	6.67%	4,420	5,856	7,546
339		Other Plant and Miscellaneous Equipment	2.62%	6.67%	16,442	28,039	33,487
340		Office Furniture and Fixtures	2.62%	6.67%	76,796	101,907	124,987
340.1		Computers and Software	2.62%	20.00%	-	-	-
341		Transportation Equipment	2.62%	20.00%	48,062	63,189	83,060
342		Stores Equipment	2.62%	4.00%	-	634	1,586
343		Tools and Work Equipment	2.62%	5.00%	5,451	6,342	7,113
344		Laboratory Equipment	2.62%	10.00%	-	-	-
345		Power Operated Equipment	2.62%	5.00%	-	-	-
346		Communications Equipment	2.62%	10.00%	12,648	15,989	21,730
347		Miscellaneous Equipment	2.62%	10.00%	-	-	-
348		Other Tangible Plant	2.62%	10.00%	-	-	-
		Rounding			-	-	-
Plant Held for Future Use							
TOTAL WATER PLANT					6,502,689	7,756,533	9,027,020

Litchfield Park Service Company - Water Division
Plant Reconciliation to Prior Rate Case

Exhibit
Rebuttal Schedule B-2
Page 3.15

Line No.	Account No.	Description	Balance Per Company Per 2000 Filing Before Adj.	CIAC Plant	Staff Rmnd Adj	Intentionally Left Blank	Intentionally Left Blank	Prior Case Adjusted Plant	Staff Rmnd Adj not recorded	Intentionally Left Blank	Initial Balance
1	301	Organization Cost	-	-	21,100	-	-	21,100	-	-	21,100
2	302	Franchise Cost	-	-	-	-	-	-	-	-	-
3	303	Land and Land Rights	671,103	-	-	-	-	671,103	-	-	671,103
4	304	Structures and Improvements	114,008	-	-	-	-	114,008	-	-	114,008
5	305	Collecting and Impounding Res.	-	-	-	-	-	-	-	-	-
6	306	Lake River and Other Intakes	-	-	-	-	-	-	-	-	-
7	307	Wells and Springs	604,794	-	8,456	-	-	613,250	-	-	613,250
8	308	Infiltration Galleries and Tunnels	-	-	-	-	-	-	-	-	-
9	309	Supply Mains	-	-	-	-	-	-	-	-	-
10	310	Power Generation Equipment	69,151	-	-	-	-	69,151	-	-	69,151
11	311	Electric Pumping Equipment	405,375	15,219	-	-	-	420,594	-	-	420,594
12	312	Water Treatment Equipment	82,310	-	-	-	-	82,310	-	-	82,310
13	313	Water Treatment Plants	-	-	-	-	-	-	-	-	-
14	314	Chemical Solution Feeders	-	-	-	-	-	-	-	-	-
15	315	Distribution Reservoirs & Standpipe	278,676	-	-	-	-	278,676	-	-	278,676
16	316	Storage tanks	-	-	-	-	-	-	-	-	-
17	317	Pressure Tanks	-	-	-	-	-	-	-	-	-
18	318	Transmission and Distribution Mains	3,887,812	808,880	158,565	-	-	4,855,257	-	-	4,855,257
19	319	Services	1,755,960	151,402	-	-	-	1,907,362	-	-	1,907,362
20	320	Meters	1,208,923	29,899	22,419	-	-	1,261,241	-	-	1,261,241
21	321	Hydrants	269,249	52,835	-	-	-	322,184	-	-	322,184
22	322	Backflow Prevention Devices	8,426	-	-	-	-	8,426	-	-	8,426
23	323	Other Plant and Miscellaneous Equipment	-	-	-	-	-	-	-	-	-
24	324	Office Furniture and Fixtures	100,842	-	-	-	-	100,842	-	-	100,842
25	325	Computers and Software	-	-	-	-	-	-	-	-	-
26	326	Transportation Equipment	901	-	-	-	-	901	-	-	901
27	327	Stores Equipment	-	-	-	-	-	-	-	-	-
28	328	Tools and Work Equipment	6,757	-	-	-	-	6,757	-	-	6,757
29	329	Laboratory Equipment	-	-	-	-	-	-	-	-	-
30	330	Power Operated Equipment	-	-	-	-	-	-	-	-	-
31	331	Communications Equipment	-	-	-	-	-	-	-	-	-
32	332	Miscellaneous Equipment	-	-	-	-	-	-	-	-	-
33	333	Other Tangible Plant	-	-	-	-	-	-	-	-	-
34	334	Rounding	-	-	-	-	-	-	-	-	-
35	335	TOTAL	2	-	(2)	-	-	10,733,161	-	-	10,733,161
36	336		9,464,288	1,058,335	210,538	-	-	10,733,161	-	-	10,733,161
37	337										
38	338										
39	339										
40	340										
41	341										

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Litchfield Park Service Company - Water Division
A/D Reconciliation to Prior Rate Case

Exhibit
Rebuttal Schedule B-2
Page 3.16

Line No.	Account No.	Description	Balance Per Company Per 2000 Filing Before Adj.	Computed Prior Case Depr Adj.	Intentionally Left Blank	Intentionally Left Blank	Intentionally Left Blank	Prior Case Adjusted A/D	Left Blank	Initial Balance
1	301	Organization Cost	-	-	-	-	-	-	-	-
2	302	Franchise Cost	-	-	-	-	-	-	-	-
3	303	Land and Land Rights	-	-	-	-	-	-	-	-
4	304	Structures and Improvements	18,839	29,859	-	-	48,698	-	-	48,698
5	305	Collecting and Impounding Res.	-	-	-	-	-	-	-	-
6	306	Lake River and Other Intakes	-	-	-	-	-	-	-	-
7	307	Wells and Springs	99,938	73,871	-	-	173,809	-	-	173,809
8	308	Infiltration Galleries and Tunnels	-	-	-	-	-	-	-	-
9	309	Supply Mains	-	-	-	-	-	-	-	-
10	310	Power Generation Equipment	11,427	(11,427)	-	-	-	-	-	-
11	311	Electric Pumping Equipment	66,985	27,270	-	-	94,255	-	-	94,255
12	312	Water Treatment Equipment	13,601	(29,005)	-	-	(15,404)	-	-	(15,404)
13	313	Water Treatment Plants	-	-	-	-	-	-	-	-
14	314	Chemical Solution Feeders	-	-	-	-	-	-	-	-
15	315	Distribution Reservoirs & Standpipe	46,049	65,774	-	-	111,824	-	-	111,824
16	316	Storage tanks	-	-	-	-	-	-	-	-
17	317	Pressure Tanks	-	-	-	-	-	-	-	-
18	318	Transmission and Distribution Mains	642,434	425,723	-	-	1,068,157	-	-	1,068,157
19	319	Services	290,160	(48,737)	-	-	241,423	-	-	241,423
20	320	Meters	199,766	101,309	-	-	301,075	-	-	301,075
21	321	Hydrants	44,491	(67,581)	-	-	(23,090)	-	-	(23,090)
22	322	Backflow Prevention Devices	1,392	(1,094)	-	-	299	-	-	299
23	323	Other Plant and Miscellaneous Equipment	-	-	-	-	-	-	-	-
24	324	Office Furniture and Fixtures	16,663	(7,810)	-	-	8,854	-	-	8,854
25	325	Computers and Software	-	-	-	-	-	-	-	-
26	326	Transportation Equipment	149	(113)	-	-	35	-	-	35
27	327	Stores Equipment	-	-	-	-	-	-	-	-
28	328	Tools and Work Equipment	1,116	552	-	-	1,669	-	-	1,669
29	329	Laboratory Equipment	-	-	-	-	-	-	-	-
30	330	Power Operated Equipment	-	4,665	-	-	4,665	-	-	4,665
31	331	Communications Equipment	-	-	-	-	-	-	-	-
32	332	Miscellaneous Equipment	-	-	-	-	-	-	-	-
33	333	Other Tangible Plant	-	-	-	-	-	-	-	-
34	334	Capacity Reserve	-	-	-	-	-	-	-	-
35	335	TOTAL	1,453,012	563,256	-	-	2,016,268	-	-	2,016,268

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2

Exhibit
Rebuttal Schedule B-2
Page 4
Witness: Bourassa

Line No.	Accumulated Depreciation	Adjusted Accum. Depr.	A Plant Retirements	B Depreciation On Capitalized Expense Plant	C A/D Removed Office Rent	D Difference to Computed Balance per B-2	E Intentionally Left Blank	Rebuttal Adjusted Accum. Depr.
1								
2								
3	Acct.							
4	No. Description							
5	301 Organization Cost							
6	302 Franchise Cost							
7	303 Land and Land Rights	12,145				(12,145)		
8	304 Structures and Improvements	448,272	(41,971)		(1,449)	17		404,869
9	305 Collecting and Impounding Res.							
10	306 Lake River and Other Intakes							
11	307 Wells and Springs	631,587		142		64		631,793
12	308 Infiltration Galleries and Tunnels							
13	309 Supply Mains							
14	310 Power Generation Equipment	56,403						56,403
15	311 Electric Pumping Equipment	628,717	(31,158)			479		598,038
16	320 Water Treatment Equipment	40,658				351		41,009
17	320.1 Water Treatment Plant							
18	320.2 Chemical Solution Feeders							
19	330 Dist. Reservoirs & Standpipe	174,345						174,345
20	330.1 Storage tanks							
21	330.2 Pressure Tanks							
22	331 Trans. and Dist. Mains	3,840,162						3,844,803
23	333 Services	896,049		65		4,577		900,699
24	334 Meters	1,930,823				4,650		1,931,628
25	335 Hydrants	162,873				1,040		163,913
26	336 Backflow Prevention Devices	7,510				36		7,546
27	339 Other Plant and Misc. Equip.	39,247						33,497
28	340 Office Furniture and Fixtures	124,862	(5,750)			125		124,987
29	340.1 Computers and Software							
30	341 Transportation Equipment	83,060						83,060
31	342 Stores Equipment	1,586						1,586
32	343 Tools and Work Equipment	7,110				3		7,113
33	344 Laboratory Equipment							
34	345 Power Operated Equipment							
35	346 Communications Equipment	21,730						21,730
36	347 Miscellaneous Equipment							
37	348 Other Tangible Plant							
38								
39	TOTALS	\$ 9,107,141	\$ (78,879)	\$ 207	\$ (1,449)	\$ 0	\$ -	\$ 9,027,020
40								
41	Adjusted Accumulated Depreciation per Direct							\$ 9,107,141
42								
43	Increase (decrease) in Plant-in-Service							\$ (80,121)
44								
45	Adjustment to Plant-in-Service							\$ (80,121)
46								

SUPPORTING SCHEDULES

Rebuttal B-2, pages 3.5 to 3.16

Rebuttal B-2, pages 4.1 to 4.3

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2 - A

Exhibit
Rebuttal Schedule B-2
Page 4.1
Witness: Bourassa

Line

No.

1	<u>A/D Plant Retirements</u>	
2		
3	304 - Structures and Improvements	\$ (41,971)
4	311 - Electric Pumping Equipment	(31,158)
5	339 - Other Plant and Miscellaneous Equipment	<u>(5,750)</u>
6		
7	Increase (Decrease) in Plant-in-Service	<u>\$ (78,879)</u>
8		
9		
10		
11		
12		
13		
14		
15		

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2 - B

Exhibit
Rebuttal Schedule B-2
Page 4.2
Witness: Bourassa

Line

No.

1 A/D on Capitalized Plant

2

3

4 Acct. Description

Depr.
Rate

Original
Cost

Yr
Factor

Depreciation

5 307 Wells and Springs

3.33% \$

11,389

0.375

\$ 142

6 331 Trans. and Dist. Mains

2.00%

8,600

0.375

65

7

8

9 Increase (Decrease) in Plant-in-Service

\$ 207

10

11

12

13

14 SUPPORTING SCHEDULE

15 Rebuttal B-2, page 3.3

16

17

Litchfield Park Service Company - Water Division
 Test Year Ended September 30, 2008
 Original Cost Rate Base Proforma Adjustments
 Adjustment Number 2 - C

Exhibit
 Rebuttal Schedule B-2
 Page 4.3
 Witness: Bourassa

Line

No.

1 A/D on Removed Capitalized Office Rent

2

3

4 Acct.

Description

Depr.
Rate

Original
Cost

Yr
Factor

Depreciation

307 Wells and Springs

3.33% \$

(7,072)

5.79

\$ (1,363)

307 Wells and Springs

2.62%

(7,072)

0.46

(85)

7

8

9 Increase (Decrease) in Plant-in-Service

\$ (1,449)

10

11

12

13

14 SUPPORTING SCHEDULE

15 Rebuttal B-2, page 3.4

16

17

Line	Item	Deferred Income Tax as of September 30, 2008 (Water and Wastewater Divisions)	Probability of Realization of Future Tax Benefit	Deductible TD (Taxable TD) Expected to be Realized	Tax Rate	Future Tax Asset Current Non-Current	Future Tax Liability Current Non-Current
1							
2							
3							
4							
5							
6							
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64							
65							
66							

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments
Adjustment Number 4

Exhibit
Rebuttal Schedule B-2
Page 6
Witness: Bourassa

Line

No.

1 Plant Retirements

2

3 Advances-in-Aid of Construction

\$ (8,677)

4

5 Contributions-in-Aid of Construction

\$ (7,888)

6

7

8

9

10

11

12

13

14

15 See Staff Adjustment 1 Schedule JMM-W6

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Computation of Working Capital

Exhibit
Rebuttal Schedule B-5
Page 1
Witness: Bourassa

Line

No.

1	Cash Working Capital (1/8 of Allowance		
2	Operation and Maintenance Expense)	\$	437,861
3	Pumping Power (1/24 of Pumping Power)		42,242
4	Purchased Water (1/24 of Purchased Water)		209

5

6

7

8

9	Total Working Capital Allowance	\$	480,312
---	---------------------------------	----	---------

10

11

12	Working Capital Requested	\$	-
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13

14

15 SUPPORTING SCHEDULES:

16 Rebuttal C-1

17

RECAP SCHEDULES:

Rebuttal B-1

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Income Statement

Exhibit
Rebuttal Schedule C-1
Page 1
Witness: Bourassa

Line No.		Test Year Adjusted Results	Adjustment	Rebuttal Test Year Adjusted Results	Proposed Rate Increase	Rebuttal Adjusted with Rate Increase
1	Revenues					
2	Metered Water Revenues	\$ 6,347,481	\$ 403,707	\$ 6,751,188	\$ 6,759,028	\$ 13,510,216
3	Unmetered Water Revenues	-	-	-	-	-
4	Other Water Revenues	127,522	-	127,522	-	127,522
5		<u>\$ 6,475,002</u>	<u>\$ 403,707</u>	<u>\$ 6,878,709</u>	<u>\$ 6,759,028</u>	<u>\$ 13,637,738</u>
6	Operating Expenses					
7	Salaries and Wages	\$ -	-	\$ -	-	\$ -
8	Purchased Water	5,011	-	5,011	-	5,011
9	Purchased Power	1,013,811	-	1,013,811	-	1,013,811
10	Fuel for Power Production	58,147	(20,309)	37,839	-	37,839
11	Chemicals	503,278	(305)	502,973	-	502,973
12	Repairs and Maintenance	44,001	-	44,001	-	44,001
13	Office Supplies and Expense	-	-	-	-	-
14	Outside Services	12,469	-	12,469	-	12,469
15	Outside Services- Other	2,382,976	(4,409)	2,378,567	-	2,378,567
16	Outside Services- Legal	14,317	-	14,317	-	14,317
17	Water Testing	28,365	-	28,365	-	28,365
18	Rents	10,647	-	10,647	-	10,647
19	Transportation Expenses	151,879	-	151,879	-	151,879
20	Insurance - General Liability	95,469	-	95,469	-	95,469
21	Insurance - Health and Life	3,319	-	3,319	-	3,319
22	Reg. Comm. Exp.	63,662	-	63,662	-	63,662
23	Reg. Comm. Exp. - Rate Case	70,000	-	70,000	-	70,000
24	Miscellaneous Expense	81,664	(827)	80,837	-	80,837
25	Bad Debt Expense	3,264	5,284	8,548	-	8,548
26	Depreciation Expense	2,291,982	(4,715)	2,287,267	-	2,287,267
27	Taxes Other Than Income	-	-	-	-	-
28	Property Taxes	373,338	6,157	379,495	-	379,495
29	Income Tax	(449,705)	164,778	(284,927)	2,608,909	2,323,982
30	Total Operating Expenses	<u>\$ 6,757,892</u>	<u>\$ 145,654</u>	<u>\$ 6,903,546</u>	<u>\$ 2,608,909</u>	<u>\$ 9,512,455</u>
31	Operating Income	<u>\$ (282,890)</u>	<u>\$ 258,053</u>	<u>\$ (24,837)</u>	<u>\$ 4,150,119</u>	<u>\$ 4,125,283</u>
32	Other Income (Expense)					
33	Interest Income	-	-	-	-	-
34	Other income (loss)	-	-	-	-	-
35	Interest Expense	(432,478)	4,068	(428,410)	-	(428,410)
36	Other Expense	-	-	-	-	-
37		<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
38	Total Other Income (Expense)	<u>\$ (432,478)</u>	<u>\$ 4,068</u>	<u>\$ (428,410)</u>	<u>\$ -</u>	<u>\$ (428,410)</u>
39	Net Profit (Loss)	<u>\$ (715,368)</u>	<u>\$ 262,121</u>	<u>\$ (453,247)</u>	<u>\$ 4,150,119</u>	<u>\$ 3,696,872</u>

SUPPORTING SCHEDULES:
Rebuttal C-1, page 2

RECAP SCHEDULES:
Rebuttal A-1

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Income Statement

Exhibit
Rebuttal Schedule C-1
Page 2.1
Witness: Bourassa

Continued on
Page 2.2

Line No.	Test Year Adjusted Results	1 Depreciation Expense	2 Property Taxes	3 Meals & Entertainment Expense	4 Bad Debt Expense	5 Normalize Fuel for Power Prod.	6 Revenue Annualization	7 Chemicals Expense
1								
2	\$ 6,347,481						\$ 403,707	
3	-							
4	127,522							
5	\$ 6,475,002	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 403,707	
6								
7								
8	\$ -							
9	5,011							
10	1,013,811							
11	58,147					(20,309)		
12	503,278							
13	44,001							
14	-							
15	12,469							
16	2,382,976							
17	14,317							
18	28,365							
19	10,647							
20	151,879							
21	95,469							
22	3,319							
23	63,862							
24	70,000							
25	81,564			(827)				
26	3,264				5,284			
27	2,291,982	(4,715)						
28	-							
29	373,338		6,157					
30	(449,705)							
31	\$ 6,757,892	\$ (4,715)	\$ 6,157	\$ (827)	\$ 5,284	\$ (20,309)	\$ -	\$ (305)
32	\$ (282,890)	\$ 4,715	\$ (6,157)	\$ 827	\$ (5,284)	\$ 20,309	\$ 403,707	\$ 305
33								
34	-							
35	(432,478)							
36	-							
37	-							
38	\$ (432,478)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
39	\$ (715,368)	\$ 4,715	\$ (6,157)	\$ 827	\$ (5,284)	\$ 20,309	\$ 403,707	\$ 305
40								
41								
42								
43								

SUPPORTING SCHEDULES:
Rebuttal C-2

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Income Statement

Exhibit
Rebuttal Schedule C-1
Page 2.2
Witness: Bourassa

Continued from
Page 2.1

Line No.	Revenues	Capitalized Expenses	Unnecessary Expense	Central Office Costs	Interest Synchronization	Income Tax	13	Rebuttal Test Year Adjusted Results	Proposed Rate Increase	Rebuttal Adjusted with Rate Increase
1	Metered Water Revenues									
2	Unmetered Water Revenues									
3	Other Water Revenues									
4										
5										
6	Operating Expenses									
7	Salaries and Wages									
8	Purchased Water									
9	Fuel for Power Production									
10	Chemicals									
11	Repairs and Maintenance									
12	Office Supplies and Expense									
13	Outside Services									
14	Outside Services- Other									
15	Outside Services- Legal									
16	Water Testing									
17	Rents									
18	Transportation Expenses									
19	Insurance - General Liability									
20	Insurance - Health and Life									
21	Reg. Comm. Exp.									
22	Reg. Comm. Exp. - Rate Case									
23	Miscellaneous Expense									
24	Bad Debt Expense									
25	Depreciation Expense									
26	Taxes Other Than Income									
27	Property Taxes									
28	Income Tax									
29										
30	Total Operating Expenses									
31	Operating Income									
32	Other Income (Expense)									
33	Interest Income									
34	Other income (loss)									
35	Interest Expense									
36	Other Expense									
37										
38	Total Other Income (Expense)									
39	Net Profit (Loss)									
40										
41										
42										
43										

SUPPORTING SCHEDULES:
Rebuttal C-2

RECAP SCHEDULES:
Rebuttal C-1, page 1

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Adjustments to Revenues and Expenses

Exhibit
Rebuttal Schedule C-2
Page 1
Witness: Bourassa

Line No.	Adjustments to Revenues and Expenses						Subtotal
	1 Depreciation Expense	2 Property Taxes	3 Meals & Entertain.	4 Bad Debt Expense	5 Fuel for Power Prod.	6 Revenue Annualization	
Revenues						403,707	403,707
Expenses	(4,715)	6,157	(827)	5,284	(20,309)		(14,410)
Operating Income	4,715	(6,157)	827	(5,284)	20,309	403,707	418,117
Interest Expense							-
Other Income / Expense							-
Net Income	4,715	(6,157)	827	(5,284)	20,309	403,707	418,117
Adjustments to Revenues and Expenses							
7 Annualize Chemicals Expense	Adjustments to Revenues and Expenses						Subtotal
	8 Capitalized Expenses	9 Unnecessary Expenses	10 Central Office Costs	11 Interest Synchronization	12 Income Taxes		
Revenues						403,707	
Expenses	(305)	(19,989)	(3,191)	18,771	164,778		145,654
Operating Income	305	19,989	3,191	(18,771)	(164,778)	258,053	
Interest Expense							
Other Income / Expense				4,068		4,068	
Net Income	305	19,989	3,191	(18,771)	4,068	(164,778)	262,121

Exhibit
Rebuttal Schedule C-2
Page 1
Witness: Bourassa

[illegible]

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Adjustments to Revenues and Expenses
Adjustment Number 1

Exhibit
Rebuttal Schedule C-2
Page 2
Witness: Bourassa

Line

<u>No.</u>	<u>Acct.</u>	<u>Description</u>	<u>Original Cost</u>	<u>Proposed Rates</u>	<u>Rebuttal Depreciation Expense</u>
1		<u>Depreciation Expense</u>			
2					
3					
4					
5	301	Organization Cost	21,100	0.00%	-
6	302	Franchise Cost	-	0.00%	-
7	303	Land and Land Rights	1,284,595	0.00%	-
8	304	Structures and Improvements	24,649,251	3.33%	820,820
9	305	Collecting and Impounding Res.	-	2.50%	-
10	306	Lake River and Other Intakes	-	2.50%	-
11	307	Wells and Springs	2,393,491	3.33%	79,703
12	308	Infiltration Galleries and Tunnels	-	6.67%	-
13	309	Supply Mains	-	2.00%	-
14	310	Power Generation Equipment	202,269	5.00%	10,113
15	311	Electric Pumping Equipment	917,055	12.50%	114,632
16	320	Water Treatment Equipment	1,337,824	3.33%	44,550
17	320.1	Water Treatment Plant	1,885,770	3.33%	62,796
18	320.2	Chemical Solution Feeders	-	20.00%	-
19	330	Dist. Reservoirs & Standpipe	439,244	2.22%	9,751
20	330.1	Storage tanks	-	2.22%	-
21	330.2	Pressure Tanks	-	5.00%	-
22	331	Trans. and Dist. Mains	28,929,171	2.00%	578,583
23	333	Services	4,249,744	3.33%	141,516
24	334	Meters	4,138,752	8.33%	344,758
25	335	Hydrants	2,055,781	2.00%	41,116
26	336	Backflow Prevention Devices	38,387	6.67%	2,560
27	339	Other Plant and Misc. Equip.	259,531	6.67%	17,311
28	340	Office Furniture and Fixtures	551,757	6.67%	36,802
29	340.1	Computers and Software	-	20.00%	-
30	341	Transportation Equipment	177,165	20.00%	35,433
31	342	Stores Equipment	31,711	4.00%	1,268
32	343	Tools and Work Equipment	23,350	5.00%	1,168
33	344	Laboratory Equipment	-	10.00%	-
34	345	Power Operated Equipment	-	5.00%	-
35	346	Communications Equipment	119,710	10.00%	11,971
36	347	Miscellaneous Equipment	-	10.00%	-
37	348	Other Tangible Plant	-	10.00%	-
38					
39		TOTALS	\$ 73,705,658		\$ 2,354,852
40					
41		Less: Amortization of Contributions			
42	311	Electric Pumping Equipment	\$ 15,219	12.5000%	\$ (1,902)
43	331	Trans. and Dist. Mains	2,854,613	2.0000%	(57,092)
44	333	Services	151,402	3.3300%	(5,042)
45	334	Meters	29,899	8.3300%	(2,491)
46	335	Hydrants	52,935	2.0000%	(1,059)
47			\$ 3,104,068		\$ (67,586)
48					
49		Total Depreciation Expense			\$ 2,287,267
50					
51		Test Year Depreciation Expense			2,291,982
52					
53		Increase (decrease) in Depreciation Expense			(4,715)
54					
55		Adjustment to Revenues and/or Expenses			\$ (4,715)
56					
57		<u>SUPPORTING SCHEDULE</u>			
58		B-2, page 3			
59		B-2, page 6.4			

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Adjustment to Revenues and Expenses
Adjustment Number 2

Exhibit
Rebuttal Schedule C-2
Page 3
Witness: Bourassa

Line No.		
1	<u>Property Taxes:</u>	
2		
3	Adjusted Revenues in year ended 09/30/08	\$ 6,878,709
4	Adjusted Revenues in year ended 09/30/08	6,878,709
5	Proposed Revenues	<u>13,637,738</u>
6	Average of three year's of revenue	\$ 9,131,719
7	Average of three year's of revenue, times 2	\$ 18,263,437
8	Add:	
9	Construction Work in Progress at 10%	\$ -
10	Deduct:	
11	Book Value of Transportation Equipment	<u>94,101</u>
12		
13	Full Cash Value	\$ 18,169,337
14	Assessment Ratio	21%
15	Assessed Value	<u>3,815,561</u>
16	Property Tax Rate	9.5187%
17		
18	Property Tax	363,193
19	Plus: Tax on Parcels	16,302
20		
21	Total Property Tax at Proposed Rates	\$ 379,495
22	Property Taxes recorded during the test year	<u>373,338</u>
23	Change in Property Taxes	<u>\$ 6,157</u>
24		
25		
26	Adjustment to Revenues and/or Expenses	<u>\$ 6,157</u>
27		
28		

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 3

Exhibit
Rebuttal Schedule C-2
Page 4
Witness: Bourassa

Line

No.

1	<u>Contractual Services - Aerotek</u>	
2		
3	Remove Contractual Services related to Black Mountain Sewer Company	\$ (42,200)
4		
5		
6		
7	Increase(decrease) in Contractual Services	<u>\$ (42,200)</u>
8		
9		
10		
11	Adjustment to Revenue and/or Expense	<u>\$ (42,200)</u>
12		
13		
14		
15		
16		
17	See Testimony	
18		
19		
20		

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Adjustment to Revenues and Expenses
Adjustment Number 3

Exhibit
Rebuttal Schedule C-2
Page 4
Witness: Bourassa

Line

No.

1 Miscellaneous Expense

2

3

4 Beverages expenses included in Miscellaneous expense

\$ (827)

5

6

7

8 Increase(decrease) in Materials and Supplies

\$ (827)

9

10

11 Adjustment to Revenue and/or Expense

\$ (827)

12

13 SUPPORTING SCHEDULES

14 Staff Schedule JMM-W16 Adjustment #3

15

16

17

18

19

20

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Adjustment to Revenues and Expenses
Adjustment Number 4

Exhibit
Rebuttal Schedule C-2
Page 5
Witness: Bourassa

Line
No.

1 Bad Debt Expense

2

3

4 Normalized Bad Debt Expense

\$ 8,548

5

6 Bad Debt Expense per Direct

3,264

7

8

9 Increase(decrease) in Bad Debt Expense

\$ 5,284

10

11

12 Adjustment to Revenue and/or Expense

\$ 5,284

13

14

15 SUPPORTING SCHEDULES

16 Staff Schedule JMM-W17 Adjustment #4

17

18

19

20

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Adjustment to Revenues and Expenses
Adjustment Number 5

Exhibit
Rebuttal Schedule C-2
Page 6
Witness: Bourassa

Line

No.

1	<u>Normalize Fuel For Power Production</u>	
2		
3	2006 - Fuel for Power Production expense	\$ 309
4	2007 - Fuel for Power Production expense	55,059
5	2008 - Fuel for Power Production expense	<u>58,147</u>
6	Total	\$ 113,516
7		
8	Normalization period - 3 years	3.00
9		
10	Normalized Fuel for Power Production expense	\$ 37,839
11		
12	Adjusted Test Year Fuel for Power Production expense	<u>58,147</u>
13		
14	Increase(decrease) in Fuel for Power Production	<u>\$ (20,309)</u>
15		
16		
17	Adjustment to Revenue and/or Expense	<u>\$ (20,309)</u>
18		
19	<u>SUPPORTING SCHEDULES</u>	
20	E-2	

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Adjustment to Revenues and Expenses
Adjustment Number 6

Exhibit
Rebuttal Schedule C-2
Page 7
Witness: Bourassa

Line

No.

1 Revenue Annualization

2

3

4 Reverse Proforma Reduction if Revenues from City of Goodyear

\$ 403,707

5

6

7 Increase(decrease) in Revenues

\$ 403,707

8

9

10 Adjustment to Revenue and/or Expense

\$ 403,707

11

12

13

14

15

16

17

18 SUPPORTING SCHEDULE

19 RUCO Schedule 4, page 2 of 15 Adjustment No. 1

20

21

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Adjustment to Revenues and Expenses
Adjustment Number 7

Exhibit
Rebuttal Schedule C-2
Page 8
Witness: Bourassa

Line

No.

1 Chemicals Expense

2

3

4 Hills Brothers Chemicals expense outside the test year.

\$ (305)

5

6

7 Increase(decrease) in Chemicals Expense

\$ (305)

8

9

10 Adjustment to Revenue and/or Expense

\$ (305)

11

12

13

14

15

16

17

18

19

20

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Adjustment to Revenues and Expenses
Adjustment Number 8

Exhibit
Rebuttal Schedule C-2
Page 9
Witness: Bourassa

Line

No.

1	<u>Capitalized Expenses</u>	
2		
3		
4		
5	307 - Wells and Springs - Hydro Controls and Pump Systems (clocks for wells)	\$ (1,114)
6	307 - Wells and Springs - Southwest Grd Wtr Consult. (well spacing evaluation)	(1,380)
7	307 - Wells and Springs - Southwest Grd Wtr Consult. (well impact analysis)	(4,823)
8	307 - Wells and Springs - Southwest Grd Wtr Consult. (well rehabilitation)	(4,072)
9	331 - Distribution Mains - Narasimhan Consulting Services (Dist. Sys. Eval.)	<u>(8,600)</u>
10		
11	Total Capitalized Expenses	\$ (19,989)
12		
13	Increase(decrease) in Contractual Services - Other	<u>\$ (19,989)</u>
14		
15		
16	Adjustment to Revenue and/or Expense	<u>\$ (19,989)</u>
17		
18		
19	<u>SUPPORTING SCHEDULE</u>	
20	Rebuttal B-2, page 3.3	
21		

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Adjustment to Revenues and Expenses
Adjustment Number 9

Exhibit
Rebuttal Schedule C-2
Page 10
Witness: Bourassa

Line

No.

1	<u>Remove Unncessary Expense</u>	
2		
3	Meals and Entert: Exp cost for the DBack game	\$ (6,400)
4	Meals and Entert: BALANCE DUE FOR 2008 XMAS PART	(953)
5	Meals and Entert: DJ SERVICE - XMAS PARTY	(495)
6	Meals and Entert: For Holiday Party Dec. 2008	(4,959)
7	Meals and Entert: Catered Lunch	(412)
8	Total	<u>\$ (13,219)</u>
9		
10	Water Divison 4-factor allocation %	24.14%
11		
12	Increase (decrease) in Contractual Services - Other	<u>\$ (3,191)</u>
13		
14		
15	Adjustment to Revenue and/or Expense	<u>\$ (3,191)</u>
16		
17		
18		
19		
20		

[illegible]

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Adjustment to Revenues and Expenses
Adjustment Number 11

Exhibit
Rebuttal Schedule C-2
Page 12
Witness: Bourassa

Line
No.

1	<u>Interest Synchronization</u>		
2			
3			
4	Fair Value Rate Base	\$ 37,502,569	
5	Weighted Cost of Debt	1.14%	
6	Interest Expense	\$ 428,410	
7			
8	Test Year Interest Expense	<u>\$ 432,478</u>	
9			
10	Increase (decrease) in Interest Expense		(4,068)
11			
12			
13			
14	Adjustment to Revenue and/or Expense	<u>\$ 4,068</u>	

15					
16					
17	<u>Weighted Cost of Debt Computation</u>				
18				Weighted	
19		<u>Amount</u>	<u>Percent</u>	<u>Cost</u>	<u>Cost</u>
20	Debt	\$ 11,506,844	17.86%	6.39%	1.14%
21	Equity	\$ 52,906,962	82.14%	12.00%	9.86%
22	Total	\$ 64,413,805	100.00%		11.00%

23
24
25
26

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Adjustment to Revenues and/or Expenses
Adjustment Number 12

Exhibit
Rebuttal Schedule C-2
Page 13
Witness: Bourassa

Line No.		Test Year Adjusted Results	Adjusted with Rate Increase
1	<u>Income Tax Computation</u>		
2			
3			
4			
5			
6			
7	Taxable Income before adjustments	\$ (738,174)	\$ 6,020,855
8	Adjustments to taxable Income		
9	Taxable Income	<u>\$ (738,174)</u>	<u>\$ 6,020,855</u>
10			
11			
12			
13	Income Before Taxes	<u>\$ (738,174)</u>	<u>\$ 6,020,855</u>
14			
15	Arizona Income Before Taxes		\$ 6,020,855
16			
17	Less Arizona Income Tax		<u>\$ 419,533</u>
18	Rate = 6.97%		
19	Arizona Taxable Income		\$ 5,601,322
20			
21	Arizona Income Taxes		\$ 419,533
22			
23	Federal Income Before Taxes		\$ 6,020,855
24			
25	Less Arizona Income Taxes		<u>\$ 419,533</u>
26			
27	Federal Taxable Income		<u>\$ 5,601,322</u>
28			
29			
30			
31	FEDERAL INCOME TAXES:		
32	15% BRACKET		\$ 7,500
33	25% BRACKET		\$ 6,250
34	34% BRACKET		\$ 8,500
35	39% BRACKET		\$ 91,650
36	34% BRACKET		\$ 1,790,549
37			Rate
38	Federal Income Taxes		<u>\$ 1,904,449</u> 31.63%
39			
40			
41	Total Income Tax		<u>\$ 2,323,982</u>
42			
43	Overall Tax Rate		<u>38.60%</u>
44			
45	Income Tax at Proposed Rates Effective Rate	<u>\$ (284,927)</u>	
46			

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Computation of Gross Revenue Conversion Factor

Exhibit
Rebuttal Schedule C-3
Page 1
Witness: Bourassa

Line		Percentage of Incremental Gross Revenues
<u>No.</u>	<u>Description</u>	
1	Federal Income Taxes	31.63%
2		
3	State Income Taxes	6.97%
4		
5	Other Taxes and Expenses	<u>0.00%</u>
6		
7		
8	Total Tax Percentage	38.60%
9		
10	Operating Income % = 100% - Tax Percentage	61.40%
11		
12		
13		
14		
15	<u>1</u> = Gross Revenue Conversion Factor	
16	Operating Income %	1.6286
17		
18	<u>SUPPORTING SCHEDULES:</u>	<u>RECAP SCHEDULES:</u>
19		Rebuttal A-1
20		

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Cost of Service Study, Using Commodity Demand Method
Operating Margins at Present Rates

Line No.	Meter Size->	1"	1 1/2"	2"	4"	8"	10"
1	Totals	\$ 6,722,618	\$ 2,072,857	\$ 1,570,524	\$ 188,685	\$ 403,707	\$ 17,579
2	Water Revenues	\$ 33,349	\$ 2,072,857	\$ 1,570,524	\$ 188,685	\$ 403,707	\$ 17,579
3	Revenue Annualizations	27,680	(8,559)	23,091	11,068	-	-
4	Misc. Revenues ¹	127,522	74,622	5,011	173	16	8
5	Reconciliation H-1 to C-1 ¹	890	521	35	1	0	0
6	Total Revenues	\$ 6,878,710	\$ 2,139,441	\$ 1,598,661	\$ 199,928	\$ 403,723	\$ 17,587
7	Operating Expenses ²	\$ 4,521,711	\$ 1,845,629	\$ 1,517,414	\$ 92,183	\$ 179,765	\$ 9,840
8	Depreciation and Amortization ²	2,287,267	955,166	873,684	337,744	15,892	6,179
9	Property Tax ³	379,495	118,032	121,782	88,197	11,030	970
10	Income Tax ⁴	(284,927)	482	(182,579)	21,887	70,423	(254)
11	Total Operating Expenses	\$ 6,903,546	\$ 2,550,079	\$ 2,330,302	\$ 1,293,527	\$ 288,354	\$ 16,736
12	Operating Income	\$ (24,836)	\$ (410,639)	\$ (122,886)	\$ 43,610	\$ 115,369	\$ 852
13	Interest Expense ⁵	432,493	181,228	170,166	58,857	6,140	1,259
14	Net Income	\$ (457,329)	\$ (591,867)	\$ (293,052)	\$ 32,783	\$ 113,034	\$ (407)
15	Rate Base ⁶	\$ 37,481,469	\$ 145,539	\$ 15,705,959	\$ 14,747,263	\$ 532,077	\$ 109,138
16	Return on Rate Base ⁷	-0.07%	1.69%	-0.83%	5.98%	7.76%	0.78%
17	Percent of Total Customers	0.75%	58.52%	35.47%	1.18%	0.14%	0.01%

¹ Allocated based on customer counts.
² Operating Expenses and Depreciation computations are shown on Schedule G-4, Page 1.
³ Property Taxes allocation based on Revenues
⁴ Income Tax from Schedule C-1, at Proposed Rates. Income Taxes allocated based on taxable income
⁵ Interest Synchronized Interest Expense. Allocation based on Rate Base
⁶ Rate Base computations are shown on Schedule G-3, Page 1
⁷ Operating Income Divided by Rate Base
⁸ 8 Inch customer (Goodyear) is expected to leave system in the future. See testimony of Greg Sorenson.

Litchfield Park Service Company - Water Division

Test Year Ended September 30, 2008

Cost of Service Study, Using Commodity Demand Method

Operating Margins at Proposed Rates

Exhibit

Rebuttal Schedule G-2

Page 1

Witness: Bourassa

Line No.	Meter Size->	Totals	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	4"	8"	10"
1	Water Revenues	\$ 13,484,305	\$ 55,215	\$ 4,799,610	\$ 4,908,287	\$ 472,621	\$ 2,440,382	\$ 320,754	\$ 455,597	\$ 31,839
2	Revenue Annualizations	26,015	2,035	(19,345)	(15,445)	13,941	27,156	17,673	-	-
3	Misc. Revenues ¹	127,522	956	74,622	45,235	1,500	5,011	173	16	8
4	Reconciliation H-1 to C-1 ¹	(104)	(1)	(61)	(37)	(1)	(4)	(0)	(0)	(0)
5	Total Revenues	\$ 13,637,737	\$ 58,205	\$ 4,854,827	\$ 4,938,040	\$ 488,060	\$ 2,472,545	\$ 338,599	\$ 455,614	\$ 31,847
6										
7	Operating Expenses ²	\$ 4,521,711	\$ 21,905	\$ 1,845,629	\$ 1,517,414	\$ 140,826	\$ 714,149	\$ 92,183	\$ 179,765	\$ 9,840
8	Depreciation and									
9	Amortization ²	2,287,267	8,765	955,166	873,684	56,277	337,744	33,559	15,892	6,179
10	Property Tax ³	379,495	1,620	135,094	137,410	13,581	68,803	9,422	12,678	886
11	Income Tax ⁴	2,323,982	9,361	671,192	864,957	102,955	499,419	76,205	94,609	5,285
12	Total Operating Expenses	\$ 9,512,455	\$ 41,651	\$ 3,607,081	\$ 3,393,465	\$ 313,639	\$ 1,620,115	\$ 211,370	\$ 302,945	\$ 22,190
13	Operating Income	\$ 4,125,282	\$ 16,554	\$ 1,247,747	\$ 1,544,576	\$ 174,421	\$ 852,430	\$ 127,229	\$ 152,669	\$ 9,657
14	Interest Expense ⁵	432,493	1,679	181,228	170,166	10,827	58,857	6,140	2,335	1,259
15	Net Income	\$ 3,692,790	\$ 14,875	\$ 1,066,518	\$ 1,374,409	\$ 163,594	\$ 793,573	\$ 121,090	\$ 150,333	\$ 8,397
16	Rate Base ⁶	\$ 37,481,469	\$ 145,539	\$ 15,705,959	\$ 14,747,263	\$ 938,327	\$ 5,100,776	\$ 532,077	\$ 202,391	\$ 109,138
17	Return on Rate Base ⁷	11.01%	11.37%	7.94%	10.47%	18.59%	16.71%	23.91%	75.43%	8.85%
18										
19	Percent of Total Customers		0.750%	58.518%	35.472%	1.176%	3.929%	0.136%	0.013%	0.006%
20										
21										

¹ Allocated based on customer counts.

² Operating Expenses and Depreciation computations are shown on Schedule G-4, Page 1.

³ Property Taxes allocation based on Revenues

⁴ Income Tax from Schedule C-1, at Proposed Rates. Income Taxes allocated based on taxable income

⁵ Interest Synchronized Interest Expense. Allocation based on Rate Base

⁶ Rate Base computations are shown on Schedule G-3, Page 1

⁷ Operating Income Divided by Rate Base

⁸ 8 Inch customer (Goodyear) is expected to leave system in the future. See testimony of Greg Sorenson.

Exhibit

Test Year Ended September 30, 2008

Cost of Service Study Using Commodity / Demand Method

Allocation of Assets to Customer Classes

[illegible]

Cost of Service Study, Using Commodity Demand Method Allocation of Expenses to Customer Classes

Exhibit
Rebuttal Schedule G-4
Page 1
Witness: Bourassa

[illegible]

Summary of Allocation of Expenses to Customer Classes

Witness: Bourassa

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Litchfield Park Service Company - Water Division
 Test Year Ended September 30, 2008
 Cost of Service Study, Using Commodity Demand Method
 Allocation of Rate Base by Function

Exhibit
 Rebuttal Schedule G-5
 Page 1
 Witness: Bourassa

Line No.	Rate Base	Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
1	Plant minus (Accumulated Depreciation	\$ 37,481,469	\$ 31,006,625	\$ 603,292	\$ 2,507,043	\$ 1,308,720	\$ 2,055,790	\$ 37,481,469
2	Contributions in Aid of Construction							
3	Advances in Aid of Construction,							
4	Meter Deposits and Deferred Income Tax)							
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
		37,481,469	31,006,625	603,292	2,507,043	1,308,720	2,055,790	37,481,469

Allocation of Plant, Less Contributions and Advances in Aid of Construction, Meter Deposits and Accumulated Depreciation to Functions

Page 2

[illegible]

Litchfield Park Service Company - Water Division
 Test Year Ended September 30, 2008
 Allocation of Plant, Less Contributions and Advances in Aid of
 Construction, Meter Deposits and Accumulated Depreciation to Functions

Line No.	Account No.	Description	Original Cost Plant	Accumulated Depreciation	Total Net Plant Values	Demand	Commodity	Customer	Meter	Service
1		General Plant Continued								
2	347	Miscellaneous Equipment								
3	348	Other Tangible Plant								
4		Subtotal General Plant	\$ 903,694	\$ 238,476	\$ 665,218	\$ 48,021	\$ -	\$ 570,834	\$ -	\$ 46,363
5		Total Plant	\$ 73,684,558	\$ 9,027,020	\$ 64,657,538	\$ 53,490,775	\$ 3,101,531	\$ 2,462,702	\$ 2,207,123	\$ 3,395,408
6										
7		Contributions in Aid of Construction, Net	(3,096,180)	860,706	(2,235,474)	(1,977,529)	(219,725)	(38,220)		
8		Advances in Aid of Construction	(22,336,975)		(22,336,975)	(20,103,277)	(2,233,697)			
9		Meter Deposits	(2,238,022)		(2,238,022)				(898,404)	(1,339,618)
10		Deferred Income Tax	(448,160)		(448,160)	(403,344)	(44,816)			
11		Deferred Reg Assets	82,561		82,561			82,561		
12		Unamortized Debt Service Costs								
13		Totals	\$ 45,647,783	\$ 9,887,726	\$ 37,481,469	\$ 31,006,625	\$ 603,292	\$ 2,507,043	\$ 1,308,720	\$ 2,055,790
14		Rate Bases (Plant - (AIAC, CIAC, Meter Deposits & Accum. Depr.))			\$ 37,481,469	\$ 31,006,625	\$ 603,292	\$ 2,507,043	\$ 1,308,720	\$ 2,055,790

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Cost of Service Study, Using Commodity Demand Method
Allocation of Expenses to Functions

Exhibit
Rebuttal Schedule G-6
Page 1
Witness: Bourassa

Line No.	Description	Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
1	Salaries and Wages ¹	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	Purchased Water ¹	5,011	-	5,011	-	-	-	5,011
3	Purchased Power ¹	1,013,811	-	1,013,811	-	-	-	1,013,811
4	Fuel For Power Production ¹	37,839	-	37,839	-	-	-	37,839
5	Chemicals ¹	502,973	-	502,973	-	-	-	502,973
6	Repairs and Maintenance ¹	44,001	39,600	4,400	-	-	-	44,001
7	Office Supplies and Expense	-	-	-	-	-	-	-
8	Outside Services	12,469	-	-	12,469	-	-	12,469
9	Outside Services - Other ¹	2,378,567	951,427	475,713	951,427	-	-	2,378,567
10	Outside Services - Legal	14,317	-	-	14,317	-	-	14,317
11	Water Testing ¹	28,365	25,529	2,837	-	-	-	28,365
12	Rents	10,647	-	-	10,647	-	-	10,647
13	Transportation Expenses ¹	151,879	37,970	-	113,909	-	-	151,879
14	Insurance - General Liability	95,469	-	-	95,469	-	-	95,469
15	Insurance - Health and Life	3,319	-	-	3,319	-	-	3,319
16	Reg. Comm. Exp.	63,662	-	-	63,662	-	-	63,662
17	Reg. Comm. Exp. - Rate Case	70,000	63,000	-	7,000	-	-	70,000
18	Miscellaneous Expense	80,837	-	-	80,837	-	-	80,837
19	Bad Debt Expense	8,548	-	-	8,548	-	-	8,548
20	Depreciation Expense ²	2,287,267	1,607,576	86,101	114,848	342,267	136,475	2,287,267
21	Taxes Other Than Income	-	-	-	-	-	-	-
22	Property Taxes, Allocated on Schedules G-1 & G-2	379,495	-	-	-	-	-	379,495
23	Income Tax, Allocated on Schedules G-1 & G-2	2,323,982	-	-	-	-	-	2,323,982
24								
25	Total	\$ 9,512,455	\$ 2,725,101	\$ 2,128,683	\$ 1,476,452	\$ 342,267	\$ 136,475	\$ 6,808,978
26								
27								

¹ See Schedule G-7, page 2.1.

² Depreciation allocation computed on Schedule G-6, Page 2.

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Allocation of Depreciation Expense to Functions

Exhibit
Rebuttal Schedule G-6
Page 2
Witness: Bourassa

Line No.	Account No.	Description	Original Cost	Depreciation Rate	Depreciation Expense	Total Depr. Expense	Demand	Commodity	Customer	Meter	Service
1		Intangible									
2	301	Organization	\$ -		\$ -						
3	302	Franchises	-		-						
4											
5		Subtotal Intangible	\$ -		\$ -		\$ -	\$ -	\$ -	\$ -	\$ -
6											
7		Source of Supply & Pumping Plant									
8	303	Land and Land Rights	\$ 1,284,595	0.000%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9	304	Structures and Improvements	24,649,251	3.330%	820,820	820,820	820,820	-	-	-	-
10	305	Collecting and Improvements Res.	-	2.500%	-	-	-	-	-	-	-
11	306	Lakes, Rivers, Other Intakes	-	2.500%	-	-	-	-	-	-	-
12	307	Wells and Springs	2,393,491	3.330%	79,703	79,703	71,733	7,970	-	-	-
13	308	Infiltration Galleries and Tunnels	-	6.670%	-	-	-	-	-	-	-
14	309	Supply Mains	-	2.000%	-	-	-	-	-	-	-
15	310	Power Generation Equipment	202,269	5.000%	10,113	10,113	9,102	1,011	-	-	-
16	311	Electric Pumping Equipment	917,055	12.500%	114,632	114,632	103,169	11,463	-	-	-
17		Subtotal Source of Supply & Pumping Plant	\$ 29,446,561		\$ 1,025,269	\$ 1,025,269	\$ 1,004,824	\$ 20,445	\$ -	\$ -	\$ -
18											
19		Water Treatment									
20	320	Water Treatment Equipment	3,223,594	3.330%	107,346	107,346	96,611	10,735	-	-	-
21		Subtotal Water Treatment	\$ 3,223,594		\$ 107,346	\$ 107,346	\$ 96,611	\$ 10,735	\$ -	\$ -	\$ -
22											
23		Transmission and Distribution Plant									
24	330	Distribution Reservoirs & Standpipe	\$ 439,244	2.220%	\$ 9,751	\$ 9,751	\$ 8,776	\$ 975	\$ -	\$ -	\$ -
25	331	Transmission and Distribution Mains	28,929,171	2.000%	578,583	578,583	520,725	57,858	-	-	-
26	333	Services	4,249,744	3.330%	141,516	141,516	-	-	-	-	141,516
27	334	Meters	4,138,752	8.330%	344,758	344,758	-	-	-	344,758	-
28	335	Hydrants	2,055,781	2.000%	41,116	41,116	-	-	41,116	-	-
29	336	Backflow Prevention Devices	38,387	6.670%	2,560	2,560	2,304	256	-	-	-
30	339	Other Plant and Miscellaneous Equipment	259,531	6.670%	17,311	17,311	15,580	1,731	-	-	-
31		Subtotal Transmission and Distribution Plant	\$ 40,110,609		\$ 1,135,596	\$ 1,135,596	\$ 547,385	\$ 60,821	\$ 41,116	\$ 344,758	\$ 141,516
32											
33		General Plant									
34	340	Office Furniture and Fixtures	\$ 551,757	6.670%	\$ 36,802	\$ 36,802	\$ -	\$ -	\$ 36,802	\$ -	\$ -
35	341	Transportation Equipment	177,165	20.000%	35,433	35,433	8,858	-	26,575	-	-
36	342	Stores Equipment	31,711	4.000%	1,268	1,268	-	-	1,268	-	-
37	343	Tools and Work Equipment	23,350	5.000%	1,168	1,168	-	-	1,168	-	-
38	344	Laboratory Equipment	-	10.000%	-	-	-	-	-	-	-
39	345	Power Operated Equipment	-	5.000%	-	-	-	-	-	-	-
40	346	Communications Equipment	119,710	10.000%	11,971	11,971	2,993	-	8,978	-	-

Exhibit
Schedule
Page 2.1
Witness: Bourassa

Line No.	Account No.	Description	Original Cost	Depreciation Rate	Depreciation Expense	Total Depr. Expense	Demand	Commodity	Customer	Meter	Service
1	General Plant Continued										
2	347	Miscellaneous Equipment	-	10.00%	-	-	-	-	-	-	-
3	348	Other Tangible Plant	-	10.00%	-	-	-	-	-	-	-
4	Subtotal General Plant		\$ 903,694		\$ 86,642	\$ 86,642	\$ 11,851	\$ -	\$ 74,791	\$ -	\$ -
5	Total Plant		\$ 73,684,558		\$ 2,354,852	\$ 2,354,852	\$ 1,660,671	\$ 92,000	\$ 115,907	\$ 344,758	\$ 141,516
6											
7											
8	Less: Amortization of Contributions										
9	311	Electric Pumping Equipment	\$ (15,219)	12.5000%	\$ (1,902)	\$ (1,902)	\$ (1,712)	\$ (190)			
10	331	Trans. and Dist. Mains	(2,854,613)	2.0000%	(57,092)	(57,092)	(51,383)	(5,709)			
11	333	Services	(151,402)	3.3300%	(5,042)	(5,042)					(5,042)
12	334	Meters	(29,899)	8.3300%	(2,491)	(2,491)				(2,491)	
13	335	Hydrants	(52,935)	2.0000%	(1,059)	(1,059)			(1,059)		
14	Total Depreciation Expense		(3,104,068)		\$ 2,287,267	\$ 2,287,267	\$ 1,607,576	\$ 86,101	\$ 114,848	\$ 342,267	\$ 136,475
15											
16											
17											
18											
19											

Litchfield Park Service Company - Water Division

Test Year Ended September 30, 2008

Summary of Commodity - Demand Method Functions Factors

Exhibit

Rebuttal Schedule G-7

Page 1

Witness: Bourassa

Line

No.

	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	4"	8"	10"	Totals
1									
2									
3	Description								
4	Commodity	0.386%	29.490%	28.558%	4.646%	24.516%	3.578%	8.535%	100.00%
5	Demand	0.341%	39.954%	40.366%	2.677%	14.308%	1.544%	0.471%	100.00%
6	Customer	0.750%	58.518%	35.472%	1.176%	3.929%	0.136%	0.013%	100.00%
7	Services	0.693%	54.124%	36.495%	1.345%	6.778%	0.471%	0.063%	100.00%
8	Meters	0.333%	42.775%	32.031%	1.770%	21.288%	1.418%	0.256%	100.00%
9									
10									
11									

12 SUPPORTING SCHEDULES

13 G-7, page 3

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
COMMODITY - DEMAND METHOD FUNCTION FACTORS
Plant and Depreciation Expense Allocations Functions

Exhibit
 Rebuttal Schedule G-7
 Page 2
 Witness: Bourassa

Line

No.

1					
2	<u>Description</u>	<u>Total</u>	<u>Demand</u>	<u>Commodity</u>	<u>Customer</u>
3	Wells	1.00	0.90	0.10	
4	Pumps & Equipment	1.00	0.90	0.10	
5	Trans. & Dist. Mains	1.00	0.90	0.10	
6	Structures & Improv.	1.00	1.00		
7	Land	1.00	1.00		
8	Customer	1.00			1.00
9	Services	1.00			1.00
10	Meters	1.00			1.00
11	Fire Hydrants	1.00			1.00
12	Transportation Equip.	1.00	0.25		0.75
13	Office Furniture	1.00			1.00
14	Communication Equip.	1.00	0.25		0.75
15	Water Treatment Equip.	1.00	0.90	0.10	
16					
17					
18					
19					
20					

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Cost of Service Study, Using Commodity Demand Method
Development Of Expense Allocation Factors

Line No.	Expense Type	Total	Demand	Commodity	Customer	Meters	Services
1	Repairs and Maintenance ¹	1.00	0.90	0.10	-	-	-
2	Contractual Services ²	1.00	0.40	0.20	0.40	-	-
3	Purchased Power/Fuel for Power Prod. ³	1.00	-	1.00	-	-	-
4	Purchased Water ⁴	1.00	-	1.00	-	-	-
5	Transportation ⁵	1.00	0.25	-	0.75	-	-
6	Chemicals ⁶	1.00	-	1.00	-	-	-
7	Water Testing ⁷	1.00	0.90	0.10	-	-	-
8	Salaries and Wages ⁸	1.00	0.40	0.20	0.40	-	-

¹ Estimated based on examination of costs in repairs and maintenance and professional judgement.
² Estimated based on examination of costs included in contractual services and professional judgement.
³ 100% related to pumping and water production.
⁴ 100% related to pumping and water production.
⁵ Based on allocation of transportation equipment. See G-7, page 2.
⁶ 100% related to water production.
⁷ Based on allocation of well plant and equipment. See G-7, page 2.
⁸ The Company does not have recorded salaries and wages expense. See allocation of contractual services.

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Cost of Service Study, Using Commodity Demand Method
Development of Class Allocation Factors

Exhibit
 Rebuttal Schedule G-7
 Page 3
 Witness: Bourassa

COMMODITY ALLOCATION FACTOR

<u>Meter Size</u>	(a) Total Gallons (in 1,000's) <u>In Test Year</u>	Percent of <u>Total</u>
5/8" x 3/4"	13,649	0.39%
3/4"	1,042,724	29.49%
1"	1,009,774	28.56%
1-1/2"	164,274	4.65%
2"	866,848	24.52%
3"	-	0.00%
4"	126,502	3.58%
6"	-	0.00%
8"	301,780	8.535%
10"	10,338	0.292%
Totals	3,535,889	100.00%

DEMAND ALLOCATION FACTOR

<u>Meter Size</u>	Number of Meters and/or <u>Services</u>	Equi- valent <u>Weight</u>	Equivalent Number of Meters and/or <u>Services</u>	Percent of <u>Total</u>
5/8" x 3/4"	116	1.0	116	0.34%
3/4"	9,055	1.5	13,583	39.95%
1"	5,489	2.5	13,723	40.37%
1-1/2"	182	5.0	910	2.68%
2"	608	8.0	4,864	14.31%
3"	-	16.0	0	0.00%
4"	21	25.0	525	1.54%
6"	-	50.0	0	0.00%
8"	2	80.0	160	0.47%
10"	1	115.0	115	0.34%
Totals	15,474		33,995	100.00%

CUSTOMER ALLOCATION FACTOR

<u>Meter Size</u>	Number of Meters	Percent of <u>Total</u>
5/8" x 3/4"	116	0.75%
3/4"	9,055	58.52%
1"	5,489	35.47%
1-1/2"	182	1.18%
2"	608	3.93%
3"	-	0.00%
4"	21	0.14%
6"	-	0.00%
8" (c)	2	0.01%
10"	1	0.01%
Totals	15,474	100.00%

SERVICES ALLOCATION FACTOR (b)

<u>Meter Size</u>	Number of <u>Services</u>	Install- ation <u>Cost</u>	Weighted Number <u>Services</u>	Percent of <u>Total</u>
5/8" x 3/4"	116	\$ 445.00	51,620	0.69%
3/4"	9,055	445.00	4,029,475	54.12%
1"	5,489	495.00	2,717,055	36.50%
1-1/2"	182	550.00	100,100	1.34%
2"	608	830.00	504,640	6.78%
3"	0	1,165.00	0	0.00%
4"	21	1,670.00	35,070	0.47%
6"	0	2,330.00	0	0.00%
8"	2	2,330.00	4,660	0.06%
10"	1	2,330.00	2,330	0.03%
Totals	15,474		7,444,950	100.00%

METER ALLOCATION FACTOR (b)

<u>Meter Size</u>	Number of Meters	Meter <u>Cost</u>	Weighted Dollars of Meters	Percent of <u>Total</u>
5/8" x 3/4"	116	\$ 155.00	17,980	0.33%
3/4"	9,055	255.00	2,309,025	42.78%
1"	5,489	315.00	1,729,035	32.03%
1-1/2"	182	525.00	95,550	1.77%
2"	608	1,890.00	1,149,120	21.29%
3"	0	2,545.00	0	0.00%
4"	21	3,645.00	76,545	1.42%
6"	0	6,920.00	0	0.00%
8"	2	6,920.00	13,840	0.26%
10"	1	6,920.00	6,920	0.13%
Totals	15,474		5,398,015	100.00%

(a) Includes customer and gallon sold annualization.

(b) Meter and Service Line cost from Arizona Corporation Commission Memo of February 21, 2008 from Marlin Scott, Jr.. Meter costs based on compound meters. Cost of service line and meter is based on costs allowed for a compound meter installation.

(c) 8 Inch customer(s) expected to leave system. See testimony of Greg Sorenson.

Litchfield Park Service Company - Water Division
 Test Year Ended September 30, 2008
 Cost of Service Study Using Commodity / Demand Method
 Computation of Monthly Minimums for Customer, Service, Meter
 Using Function Costs and Expenses

Exhibit
 Rebuttal Schedule G-8
 Page 1
 Witness: Bourassa

Line No.		Customer	Service	Meter
1	Return on Rate Base	275,930	144,040	226,264
2	Misc. Revenues	(1)		
3	Customer, Services and Meter Expenses (From Sch. G-6, Page 1)	1,476,452	136,475	342,267
4	Property Taxes	379,495		
5	Income Taxes	2,323,982		
6	Total Revenue Requirement / Customer, Meter & Service (Line 13+15+16+17)	4,455,858	280,515	568,532
7				
8	Customer Charge			
9	Number of Bills =	15,474	times	
10		185,688		
11	Charge per Bill	\$	24.00	
12	(Customer Revenue Requirement divided by Annualized Number of Bills)			
13				
14	Service Line and Meter Charge			
15	Equivalent 5/8 Meters		407,940	407,940
16				
17	Charge per Equivalent Meter		\$	0.69
18			\$	1.39
19				
20	CUSTOMER CHARGE:			
21	Monthly Minimum for 5/8 Inch Meter (with no water included in Minimum or Demand Charge)			
22	Charge per Bill		\$	24.00
23	Charge per Equivalent Service Line			0.69
24	Charge per Equivalent Meter			1.39
25	(Service and Meter Revenue Requirement divided by Annual Equivalent Meters)			
26	Monthly Minimum for 5/8 Inch Meter, WITHOUT Demand Charge Included		\$	26.08

[illegible]

Litchfield Park Service Company - Water Division
 Test Year Ended September 30, 2008
 Cost of Service Study Using Commodity / Demand Method
 Computation Demand Charge and Commodity

Exhibit
 Rebuttal Schedule G-8
 Page 3
 Witness: Bourassa

Line No.		Commodity	Customer	Service	Meter	Demand
1	Return on Rate Base	66,399	275,930	226,264	144,040	3,412,649
2	Less: Miscellaneous Revenues		(127,522)			
3						
4	Expenses (From Sch. G-6, Page 1)	2,128,683	1,476,452	136,475	342,267	2,725,101
5	Property taxes		379,495			
6	Income Taxes		2,323,982			
7	Total Revenue Requirement by function	2,195,082	4,328,337	362,739	486,308	6,137,750
8	Gallons Sold (in 1,000's)(Zero Gallons in Minimum) (G-7, page 3)	3,535,889				
9	Computed Commodity Rate	<u>\$ 0.6208</u>				
10	Annualized Number of Bills		185,688			
11	Equivalent Meters and Service Lines					
12	Customer Charge (line 18 divided by line 21)					
13	Meter, Service Line & Demand Charge (Line 18 divided by Line 22)					
14	Total Monthly Minimum Charge for a 5/8 Inch Meter (Sum of Customer					
15	Service Line, Meter and Demand Charge on Lines 23 & Line 24)					
16						
17						
18	Monthly Minimum					
19	5/8 Inch Meter	\$ 40.44	1.0 \$	40.44		
20	3/4 Inch Meter	\$ 40.44	1.5 \$	60.66		
21	1 Inch Meter	\$ 40.44	2.5 \$	101.09		
22	1 1/2 Inch Meter	\$ 40.44	5.0 \$	202.18		
23	2 Inch Meter	\$ 40.44	8.0 \$	323.49		
24	3 Inch Meter	\$ 40.44	16.0 \$	646.99		
25	4 Inch Meter	\$ 40.44	25.0 \$	1,010.92		
26	6 Inch Meter	\$ 40.44	50.0 \$	2,021.84		
27	8 Inch Meter	\$ 40.44	80.0 \$	3,234.94		
28						
29						
30						
31						

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity

Line No.	Single Tier Rate Design with Some Customer and Demand Costs recovered via the Commodity Rate	Total Rev. Req.	%	Portion of Rev. Req.	
1	Revenue Requirements Collected via Commodity Charge				
2					
3	Customer, Service, and Meter Costs	\$ 5,177,384	45%	\$ 2,329,823	
4	Demand Costs	6,137,750	45%	2,761,987	
5	Commodity Costs	2,195,082	100%	2,195,082	
6	Total Costs to be Collected via Commodity			\$ 7,286,892	
7	Gallons Sold			3,535,889	
8					
9	Commodity Charge (per 1,000 gallons)			\$ 2,061	
10					
11	Revenue Requirement Collected				
12	Monthly Minimum 5/8 Meter				
13	Total Revenue Requirement			\$ 13,510,216	
14	Less: Portion of Revenue Requirement Collected via Commodity Charge			(7,286,892)	
15	Balance to be Recovered through Monthly Minimum			\$ 6,223,323	46.06%
16					
17	Number of Equivalent 5/8 Inch Meter Billings			407,940	
18					
19	Computed Monthly Minimum 5/8 Inch Meter			\$ 15.26	
20					
21					
22					
23					
24					
25					
26					
27	Meter Size	5/8"	Meter Ratio	Monthly Minimum	
28	5/8 Inch Meter	15.26	1.0	\$ 15.26	
29	3/4 Inch Meter	15.26	1.5	\$ 22.88	
30	1 Inch Meter	15.26	2.5	\$ 38.14	
31	1 1/2 Inch Meter	15.26	5.0	\$ 76.28	
32	2 Inch Meter	15.26	8.0	\$ 122.04	
33	3 Inch Meter	15.26	16.0	\$ 244.09	
34	4 Inch Meter	15.26	25.0	\$ 381.39	
35	6 Inch Meter	15.26	50.0	\$ 762.77	
36	8 Inch Meter	15.26	80.0	\$ 1,220.44	
37	10 Inch Meter	15.26			
38					

Litchfield Park Service Company - Water Division
 Exhibit
 Rebuttal Schedule G-9
 Page 1
 Witness: Bourassa

Test Year Ended September 30, 2008

Comparison of Proposed Rates to Computed Costs

For a 5/8 Inch Residential Meter (With Required Operating Margin)

Column Number-->													(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Line No.	Water Usage	Revenues			Demand Charges	Customer Charges	Service		Meter Charges	Commodity Charges	Total Charges & Costs	Total Revenues minus Total Charges & Costs									
		Monthly Minimum	Commodity	Total			Line Charges														
1	0	\$ 10.32	\$ -	\$ 10.32	\$ 15.05	\$ 23.31	\$ 0.89	\$ 1.19	0	\$ 40.44	\$ (30.12)										
2	1,000	10.32	1.22	11.54	15.05	23.31	0.89	1.19	0.621	41.06	(29.52)										
3	2,000	10.32	2.44	12.76	15.05	23.31	0.89	1.19	1.242	41.68	(28.92)										
4	3,000	10.32	3.66	13.98	15.05	23.31	0.89	1.19	1.862	42.30	(28.32)										
5	4,000	10.32	5.48	15.80	15.05	23.31	0.89	1.19	2.483	42.92	(27.12)										
6	5,000	10.32	7.30	17.62	15.05	23.31	0.89	1.19	3.104	43.54	(25.92)										
7	6,000	10.32	9.12	19.44	15.05	23.31	0.89	1.19	3.725	44.16	(24.72)										
8	7,000	10.32	10.94	21.26	15.05	23.31	0.89	1.19	4.346	44.78	(23.52)										
9	8,000	10.32	12.76	23.08	15.05	23.31	0.89	1.19	4.966	45.40	(22.32)										
10	9,000	10.32	14.58	24.90	15.05	23.31	0.89	1.19	5.587	46.02	(21.12)										
11	10,000	10.32	17.00	27.32	15.05	23.31	0.89	1.19	6.208	46.64	(19.32)										
12	12,000	10.32	21.84	32.16	15.05	23.31	0.89	1.19	7.450	47.89	(15.73)										
13	14,000	10.32	26.68	37.00	15.05	23.31	0.89	1.19	8.691	49.13	(12.13)										
14	16,000	10.32	31.52	41.84	15.05	23.31	0.89	1.19	9.933	50.37	(8.53)										
15	18,000	10.32	36.36	46.68	15.05	23.31	0.89	1.19	11.174	51.61	(4.93)										
16	20,000	10.32	41.20	51.52	15.05	23.31	0.89	1.19	12.416	52.85	(1.33)										
17	25,000	10.32	53.30	63.62	15.05	23.31	0.89	1.19	15.520	55.96	7.66										
18	30,000	10.32	65.40	75.72	15.05	23.31	0.89	1.19	18.624	59.06	16.66										
19	35,000	10.32	77.50	87.82	15.05	23.31	0.89	1.19	21.728	62.16	25.66										
20	40,000	10.32	89.60	99.92	15.05	23.31	0.89	1.19	24.832	65.27	34.65										
21	45,000	10.32	101.70	112.02	15.05	23.31	0.89	1.19	27.936	68.37	43.65										
22	50,000	10.32	113.80	124.12	15.05	23.31	0.89	1.19	31.040	71.48	52.64										
23	60,000	10.32	138.00	148.32	15.05	23.31	0.89	1.19	37.248	77.68	70.64										
24	70,000	10.32	162.20	172.52	15.05	23.31	0.89	1.19	43.456	83.89	88.63										
25	80,000	10.32	186.40	196.72	15.05	23.31	0.89	1.19	49.664	90.10	106.62										
26	90,000	10.32	210.60	220.92	15.05	23.31	0.89	1.19	55.872	96.31	124.61										
27	100,000	10.32	234.80	245.12	15.05	23.31	0.89	1.19	62.080	102.52	142.60										

Column Number-->

Litchfield Park Service Company - Water Division

Test Year Ended September 30, 2008

Comparison of Proposed Rates to Computed Costs

For a 3/4 Inch Residential Meter (With Required Operating Margin)

Exhibit
Rebuttal Schedule G-9

Page 2

Witness: Bourassa

Line No.	Water Usage	Revenues					Service			Commodity			Total		(Col. 2 - Col. 8)	
		Monthly		Minimum		Total	Demand Charges	Customer Charges	Service Line Charges	Meter Charges	Commodity Charges	Total Charges & Costs	Total Charges & Costs	Total Revenues minus Total Charges	(9)	(9)
		\$	\$	\$	\$											
1	0	0	0	0	0	26.32	\$ 22.57	\$ 34.96	\$ 1.33	\$ 1.79	0	\$ 60.66	\$ (34.34)			
2	1,000	26.32	1.22	27.54	22.57	34.96	22.57	34.96	1.33	1.79	0.621	61.28	(33.74)			
3	2,000	26.32	2.44	28.76	22.57	34.96	22.57	34.96	1.33	1.79	1.242	61.90	(33.14)			
4	3,000	26.32	3.66	29.98	22.57	34.96	22.57	34.96	1.33	1.79	1.862	62.52	(32.54)			
5	4,000	26.32	5.48	31.80	22.57	34.96	22.57	34.96	1.33	1.79	2.483	63.14	(31.34)			
6	5,000	26.32	7.30	33.62	22.57	34.96	22.57	34.96	1.33	1.79	3.104	63.76	(30.14)			
7	6,000	26.32	9.12	35.44	22.57	34.96	22.57	34.96	1.33	1.79	3.725	64.38	(28.94)			
8	7,000	26.32	10.94	37.26	22.57	34.96	22.57	34.96	1.33	1.79	4.346	65.00	(27.74)			
9	8,000	26.32	12.76	39.08	22.57	34.96	22.57	34.96	1.33	1.79	4.966	65.62	(26.55)			
10	9,000	26.32	14.58	40.90	22.57	34.96	22.57	34.96	1.33	1.79	5.587	66.24	(25.35)			
11	10,000	26.32	17.00	43.32	22.57	34.96	22.57	34.96	1.33	1.79	6.208	66.86	(23.55)			
12	12,000	26.32	21.84	48.16	22.57	34.96	22.57	34.96	1.33	1.79	7.450	68.10	(19.95)			
13	14,000	26.32	26.68	53.00	22.57	34.96	22.57	34.96	1.33	1.79	8.691	69.35	(16.35)			
14	16,000	26.32	31.52	57.84	22.57	34.96	22.57	34.96	1.33	1.79	9.933	70.59	(12.75)			
15	18,000	26.32	36.36	62.68	22.57	34.96	22.57	34.96	1.33	1.79	11.174	71.83	(9.15)			
16	20,000	26.32	41.20	67.52	22.57	34.96	22.57	34.96	1.33	1.79	12.416	73.07	(5.56)			
17	25,000	26.32	53.30	79.62	22.57	34.96	22.57	34.96	1.33	1.79	15.520	76.18	3.44			
18	30,000	26.32	65.40	91.72	22.57	34.96	22.57	34.96	1.33	1.79	18.624	79.28	12.44			
19	35,000	26.32	77.50	103.82	22.57	34.96	22.57	34.96	1.33	1.79	21.728	82.38	21.43			
20	40,000	26.32	89.60	115.92	22.57	34.96	22.57	34.96	1.33	1.79	24.832	85.49	30.43			
21	45,000	26.32	101.70	128.02	22.57	34.96	22.57	34.96	1.33	1.79	27.936	88.59	39.42			
22	50,000	26.32	113.80	140.12	22.57	34.96	22.57	34.96	1.33	1.79	31.040	91.70	48.42			
23	60,000	26.32	138.00	164.32	22.57	34.96	22.57	34.96	1.33	1.79	37.248	97.90	66.41			
24	70,000	26.32	162.20	188.52	22.57	34.96	22.57	34.96	1.33	1.79	43.456	104.11	84.40			
25	80,000	26.32	186.40	212.72	22.57	34.96	22.57	34.96	1.33	1.79	49.664	110.32	102.40			
26	90,000	26.32	210.60	236.92	22.57	34.96	22.57	34.96	1.33	1.79	55.872	116.53	120.39			
27	100,000	26.32	234.80	261.12	22.57	34.96	22.57	34.96	1.33	1.79	62.080	122.74	138.38			

Litchfield Park Service Company - Water Division

Test Year Ended September 30, 2008

Comparison of Proposed Rates to Computed Costs

For a 1 Inch Residential Meter (With Required Operating Margin)

Exhibit
Rebuttal Schedule G-9

Page 3

Witness: Bourassa

Column Number-->												
Line No.	Water Usage	Revenues				Demand Charges	Customer Charges	Service Line	Meter Charges	Commodity Charges	Total Charges & Costs	Total Revenues minus Total Charges & Costs
		Monthly Minimum	Commodity	Total								
1	0	\$ 43.86	\$ -	\$ 43.86	\$ 37.61	\$ 58.27	\$ 2.22	\$ 2.98	0	\$ 101.09	\$ (57.23)	
2	1,000	43.86	1.82	45.68	37.61	58.27	2.22	2.98	0.621	101.71	(56.03)	
3	2,000	43.86	3.64	47.50	37.61	58.27	2.22	2.98	1.242	102.33	(54.83)	
4	3,000	43.86	5.46	49.32	37.61	58.27	2.22	2.98	1.862	102.95	(53.63)	
5	4,000	43.86	7.28	51.14	37.61	58.27	2.22	2.98	2.483	103.58	(52.44)	
6	5,000	43.86	9.10	52.96	37.61	58.27	2.22	2.98	3.104	104.20	(51.24)	
7	6,000	43.86	10.92	54.78	37.61	58.27	2.22	2.98	3.725	104.82	(50.04)	
8	7,000	43.86	12.74	56.60	37.61	58.27	2.22	2.98	4.346	105.44	(48.84)	
9	8,000	43.86	14.56	58.42	37.61	58.27	2.22	2.98	4.966	106.06	(47.64)	
10	9,000	43.86	16.38	60.24	37.61	58.27	2.22	2.98	5.587	106.68	(46.44)	
11	10,000	43.86	18.20	62.06	37.61	58.27	2.22	2.98	6.208	107.30	(45.24)	
12	12,000	43.86	21.84	65.70	37.61	58.27	2.22	2.98	7.450	108.54	(42.84)	
13	14,000	43.86	25.48	69.34	37.61	58.27	2.22	2.98	8.691	109.78	(40.44)	
14	16,000	43.86	29.12	72.98	37.61	58.27	2.22	2.98	9.933	111.02	(38.04)	
15	18,000	43.86	32.76	76.62	37.61	58.27	2.22	2.98	11.174	112.27	(35.65)	
16	20,000	43.86	36.40	80.26	37.61	58.27	2.22	2.98	12.416	113.51	(33.25)	
17	25,000	43.86	48.50	92.36	37.61	58.27	2.22	2.98	15.520	116.61	(24.25)	
18	30,000	43.86	60.60	104.46	37.61	58.27	2.22	2.98	18.624	119.72	(15.26)	
19	35,000	43.86	72.70	116.56	37.61	58.27	2.22	2.98	21.728	122.82	(6.26)	
20	40,000	43.86	84.80	128.66	37.61	58.27	2.22	2.98	24.832	125.92	2.74	
21	45,000	43.86	96.90	140.76	37.61	58.27	2.22	2.98	27.936	129.03	11.73	
22	50,000	43.86	109.00	152.86	37.61	58.27	2.22	2.98	31.040	132.13	20.73	
23	60,000	43.86	133.20	177.06	37.61	58.27	2.22	2.98	37.248	138.34	38.72	
24	70,000	43.86	157.40	201.26	37.61	58.27	2.22	2.98	43.456	144.55	56.71	
25	80,000	43.86	181.60	225.46	37.61	58.27	2.22	2.98	49.664	150.76	74.70	
26	90,000	43.86	205.80	249.66	37.61	58.27	2.22	2.98	55.872	156.96	92.70	
27	100,000	43.86	230.00	273.86	37.61	58.27	2.22	2.98	62.080	163.17	110.69	

Litchfield Park Service Company - Water Division

Test Year Ended September 30, 2008

Revenue Summary

With Annualized Revenues to Year End Number of Customers

Exhibit
Rebuttal Schedule H-1

Page 1

Witness: Bourassa

Line No.	Meter Size	Class	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues
1	5/8 Inch	Residential	\$ 7,929	\$ 12,382	\$ 4,453	56.16%	0.12%	0.09%
2	3/4 Inch	Residential	2,023,567	4,687,168	2,663,601	131.63%	30.10%	34.76%
3	1 Inch	Residential	1,988,898	4,526,700	2,539,802	127.83%	29.56%	33.57%
4	1.5 Inch	Residential	54,252	96,290	42,038	77.49%	0.81%	0.71%
5	2 Inch	Residential	159,078	234,227	75,149	47.24%	2.37%	1.74%
6	4 Inch	Residential	19,356	32,030	12,675	65.48%	0.29%	0.24%
7								
8		Subtotal	4,251,079	9,588,796	5,337,717	125.56%	63.24%	71.11%
9								
10	5/8 Inch	Commercial	\$ 24,344	\$ 40,954	\$ 16,610	68.23%	0.36%	0.30%
11	3/4 Inch	Commercial	12,320	30,065	17,745	144.04%	0.18%	0.22%
12	1 Inch	Commercial	31,023	71,401	40,379	130.16%	0.46%	0.53%
13	1.5 Inch	Commercial	64,158	113,680	49,522	77.19%	0.95%	0.84%
14	2 Inch	Commercial	394,253	586,940	192,688	48.87%	5.86%	4.35%
15	4 Inch	Commercial	64,990	108,554	43,564	67.03%	0.97%	0.81%
16	10 Inch	Commercial	17,579	31,839	14,260	81.12%	0.26%	0.24%
17								
18		Subtotal	\$ 608,665	\$ 983,433	\$ 374,768	61.57%	9.05%	7.29%
19								
20								
21	5/8 Inch	Irrigation	\$ 1,076	\$ 1,879	\$ 803	74.56%	0.02%	0.01%
22	3/4 Inch	Irrigation	36,970	82,378	45,407	122.82%	0.55%	0.61%
23	1 Inch	Irrigation	151,173	310,186	159,013	105.19%	2.25%	2.30%
24	1.5 Inch	Irrigation	148,413	262,651	114,238	76.97%	2.21%	1.95%
25	2 Inch	Irrigation	908,626	1,504,279	595,653	65.56%	13.52%	11.16%
26	4 Inch	Irrigation	104,340	180,169	75,829	72.67%	1.55%	1.34%
27								
28		Subtotal	1,350,600	2,341,542	990,943	73.37%	20.09%	17.36%
29								
30		Hydrant	108,568	114,936	6,369	5.87%	1.61%	0.85%
31		Bulk Water	403,707	455,597	51,891	12.85%	6.01%	3.38%
32								
33		Total Revenues Before Annualization	\$ 6,722,618	\$ 13,484,305	\$ 6,761,687	100.58%	100.00%	100.00%
34								

Exhibit
Rebuttal Schedule H-1
Page 2
Witness: Bourassa

Line No.	Meter Size	Class	Revenue Annualization				Percent Change	Additional Bills	Additional Gallons to be Pumped (In 1,000's)
			Present Revenues	Proposed Revenues	Dollar Change	Dollar Change			
1			\$	(64)	\$	(100)		(6)	(27)
2	5/8 Inch	Residential		(8,221)		(18,503)	0.00%	(418)	C-2, pg. 5.1
3	3/4 Inch	Residential		(6,783)		(13,833)	0.00%	(167)	C-2, pg. 5.2
4	1 Inch	Residential		(1,235)		(2,119)	0.00%	(12)	C-2, pg. 5.3
5	1.5 Inch	Residential		14,837		19,943	34.41%	119	C-2, pg. 5.4
6	2 Inch	Residential		-		-	0.00%	-	C-2, pg. 5.5
7	4 Inch	Residential		-		-	0.00%	-	-
8		Subtotal	\$	(1,467)	\$	(14,613)	896.40%	(484)	(2,262)
9	5/8 Inch	Commercial	\$	1,321	\$	2,136	61.71%	137	326
10	3/4 Inch	Commercial		(250)		(652)	0.00%	(17)	C-2, pg. 5.6
11	1 Inch	Commercial		(2,335)		(5,397)	0.00%	(81)	(107) C-2, pg. 5.7
12	1.5 Inch	Commercial		1,280		2,201	71.87%	12	(1,011) C-2, pg. 5.8
13	2 Inch	Commercial		19,732		27,090	37.29%	145	730 C-2, pg. 5.9
14	4 Inch	Commercial		11,068		17,673	59.67%	19	8,989 C-2, pg. 5.10
15	10 Inch	Commercial		-		-	0.00%	-	6,518 C-2, pg. 5.11
16		Subtotal	\$	30,816	\$	43,050	-45.62%	215	15,444
17	5/8 Inch	Irrigation	\$	-	\$	(190)	0.00%	-	C-2, pg. 5.12
18	3/4 Inch	Irrigation		(88)		(102)	0.00%	(3)	(53) C-2, pg. 5.13
19	1 Inch	Irrigation		1,889		3,786	100.41%	35	1,104 C-2, pg. 5.14
20	1.5 Inch	Irrigation		8,006		13,859	73.10%	67	4,728 C-2, pg. 5.15
21	2 Inch	Irrigation		(13,467)		(21,985)	0.00%	(43)	(8,435) C-2, pg. 5.16
22	4 Inch	Irrigation		-		-	0.00%	-	-
23		Subtotal	\$	(3,660)	\$	(4,530)	23.80%	56	(2,656)
24		Hydrant		1,990		2,108	5.93%	-	596
25		Bulk Water		-		-	0.00%	-	C-2, pg. 5.17
26		Total Revenue Annualization	\$	27,680	\$	26,015	-101.01%	(213)	11,122

Litchfield Park Service Company - Water Division

Test Year Ended September 30, 2008

Revenue Summary

With Annualized Revenues to Year End Number of Customers

Exhibit
Schedule H-1
Page 3
Witness: Bourassa

Line No.	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues
1						
2						
3	\$ 6,722,618	\$ 13,484,305	\$ 6,761,687	100.58%	100.00%	100.00%
4	27,680	26,015	(1,665.10)	-6.02%	0.41%	0.19%
5	\$ 6,750,298	\$ 13,510,320	\$ 6,760,022	100.14%		
6						
7	\$ 127,522	\$ 127,522	-	0.00%	1.90%	0.95%
8	890	(104)	(994)	-111.69%	0.01%	0.00%
9	\$ 6,878,710	\$ 13,637,737	\$ 6,759,028	98.26%	0.00%	0.00%
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Customer Summary

Exhibit
Rebuttal Schedule H-2
Page 1
Witness: Bourassa

Line No.	Meter Size, Class	(a) Average Number of Customers at 9/30/2008	Average Consumption	Average Bill		Proposed Increase	
				Present Rates	Proposed Rates	Dollar Amount	Percent Amount
1	5/8 Inch Residential	58	4,661 \$	10.80	17.00	6.20	57.36%
2	3/4 Inch Residential	8,919	9,537	18.64	42.20	23.56	126.39%
3	1 Inch Residential	5,209	14,556	31.56	70.35	38.79	122.89%
4	1.5 Inch Residential	44	57,667	102.47	175.63	73.16	71.40%
5	2 Inch Residential	101	58,065	130.90	177.08	46.18	35.28%
6	4 Inch Residential	3	308,972	537.59	847.71	310.12	57.69%
7	Subtotal	14,333					
8							
9	5/8 Inch Commercial	148	5,342 \$	11.55	20.04	8.49	73.51%
10	3/4 Inch Commercial	57	8,000 \$	16.61	40.88	24.27	146.09%
11	1 Inch Commercial	83	13,804	30.57	68.98	38.41	125.65%
12	1.5 Inch Commercial	46	67,854	115.92	200.29	84.37	72.78%
13	2 Inch Commercial	232	65,909	141.25	196.06	54.81	38.80%
14	4 Inch Commercial	8	388,827	643.00	1,040.96	397.96	61.89%
15	10 Inch Commercial	1	861,500	1,464.93	2,524.73	1,059.80	72.34%
16	Subtotal	575					
17							
18	5/8 Inch Irrigation	3	18,722 \$	29.21	49.63	20.41	69.88%
19	3/4 Inch Irrigation	115	15,176	26.08	57.04	30.96	118.70%
20	1 Inch Irrigation	215	34,762	58.24	115.99	57.75	99.16%
21	1.5 Inch Irrigation	86	88,340	142.96	249.86	106.90	74.78%
22	2 Inch Irrigation	234	204,389	324.04	531.18	207.14	63.92%
23	4 Inch Irrigation	8	724,899	1,086.62	1,854.26	767.64	70.64%
24	Subtotal	661					
25							
26	Hydrant	23	120,247 \$	400.62	424.12	23.50	5.87%
27	Bulk Water	2	12,574,167	16,820.65	18,983.23	2,162.58	12.86%
28							
29	Total	15,594					

(a) Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Customer Summary

Exhibit
Rebuttal Schedule H-2
Page 2
Witness: Bourassa

Line No.	Meter Size, Class	(a) Average Number of Customers at 9/30/2008	Median Consumption	Median Bill		Proposed Increase	
				Present Rates	Proposed Rates	Dollar Amount	Percent Amount
1	5/8 Inch Residential	58	3,000	\$ 9.36	\$ 13.98	4.62	49.36%
2	3/4 Inch Residential	8,919	7,000	15.29	37.26	21.97	143.66%
3	1 Inch Residential	5,209	10,000	25.55	62.06	36.51	142.90%
4	1.5 Inch Residential	44	24,000	58.03	97.76	39.73	68.46%
5	2 Inch Residential	101	21,000	81.97	104.78	22.81	27.83%
6	4 Inch Residential	3	5,000	136.35	217.10	80.75	59.22%
7	Subtotal	14,333					
8							
9	5/8 Inch Commercial	148	7,000	\$ 13.74	\$ 23.06	9.32	67.83%
10	3/4 Inch Commercial	57	-	9.17	28.14	18.97	206.83%
11	1 Inch Commercial	83	7,000	21.59	56.60	35.01	162.16%
12	1.5 Inch Commercial	46	43,000	83.11	140.14	57.03	68.62%
13	2 Inch Commercial	232	22,000	83.29	106.60	23.31	27.99%
14	8 Inch Commercial	2	11,056,000	14,816.67	16,751.52	1,934.85	13.06%
15	10 Inch Commercial	1	820,500	1,410.81	2,450.11	1,039.30	73.67%
16	Subtotal	569					
17							
18	5/8 Inch Irrigation	3	5,000	\$ 11.10	\$ 19.42	8.32	74.95%
19	3/4 Inch Irrigation	115	-	13.97	37.24	23.27	166.54%
20	1 Inch Irrigation	215	17,000	34.79	74.80	40.01	115.00%
21	1.5 Inch Irrigation	86	50,000	92.35	157.08	64.73	70.09%
22	2 Inch Irrigation	234	123,000	216.61	334.22	117.61	54.30%
23	4 Inch Irrigation	8	463,002	740.91	1,220.46	479.55	64.72%
24	Subtotal	661					
25							
26	Hydrant	23	27,000	\$ 167.50	\$ 198.46	30.96	18.48%
27	Bulk Water	2	11,056,000	14,816.67	16,751.52	1,934.85	13.06%
28							
29	Total	15,586					

(a) Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.

Litchfield Park Service Company - Water Division
 Test Year Ended September 30, 2008
 Present and Proposed Rates

Exhibit
 Rebuttal Schedule H-3
 Page 1
 Witness: Bourassa

Line No.	Monthly Usage Charge for: Meter Size (All Classes):	Present Rates	Proposed Rates	Change	Percent Change
1	5/8 Inch	\$	10.32	\$ 3.57	52.89%
2	3/4 Inch		26.32	18.02	217.06%
3	1 Inch		43.86	29.26	200.41%
4	1 1/2 Inch		54.08	25.48	89.09%
5	2 Inch		66.56	10.06	17.81%
6	3 Inch	NT	133.12	133.12	
7	4 Inch		208.00	76.00	57.58%
8	6 Inch	NT	416.00	416.00	
9	8 Inch		499.20	274.20	121.87%
10	10 Inch		956.80	626.80	189.94%
11	12 Inch		1,248.00	798.00	177.33%
12	Construction - Hydrants				
13		\$	100.00	by meter size	
14					
15	<u>Gallons In Minimum (All Meter Sizes and Classes)</u>				
16					
17					
18	<u>Commodity Rates</u>				
19	<u>(Residential, Commercial, Industrial)</u>				
20					
21	All Meter Sizes (except Construction)				
22					
23					
24					
25	5/8 Inch and 3/4 Inch Meter - Residential				
26					
27					
28					
29	5/8 Inch and 3/4 Inch Meter Com., Irr.				
30					
31					
32	1 Inch Meter - All Classes except Constr.				
33					
34					
35	1.5 Inch Meter - All Classes except Constr.				
36					
37					
38	NT = No Tariff				

(Per 1,000 gallons)

Present Rate Proposed Rate

Block

0 gallons to 5,000 gallons	\$ 0.87	N/A	\$ 1.22
Over 5,000 gallons	\$ 1.32	N/A	\$ 1.82
		N/A	\$ 2.42
0 gallons to 3,000 gallons			
3,001 gallons to 9,000 gallons			
over 9,000 gallons			
0 gallons to 10,000 gallons			
over 10,000 gallons			
0 gallons to 20,000 gallons			
over 20,000 gallons			
0 gallons to 30,000 gallons			
over 30,000 gallons			

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Present and Proposed Rates

Exhibit
Rebuttal Schedule H-3
Page 2
Witness: Bourassa

Line No.	Commodity Rates (Residential, Commercial, Industrial)	Block	(Per 1,000 gallons)	
			Present Rate	Proposed Rate
1				
2				
3				
4				
5	2 Inch Meter - All Classes except Constr.	0 gallons to 50,000 gallons over 50,000 gallons	N/A N/A	1.82 2.42
6				
7				
8	3 Inch Meter -All Classes except Constr.	0 gallons to 120,000 gallons over 120,000 gallons	N/A N/A	1.82 2.42
9				
10				
11	4 Inch Meter- All Classes except Constr.	0 gallons to 180,000 gallons over 180,000 gallons	N/A N/A	1.82 2.42
12				
13				
14	6 Inch Meter - All Classes except Constr.	0 gallons to 360,000 gallons over 360,000 gallons	N/A N/A	1.82 2.42
15				
16				
17	8 Inch Meter - All Classes except Constr.	0 gallons to 670,000 gallons over 670,000 gallons	N/A N/A	1.82 2.42
18				
19				
20	10 Inch Meter - All Classes except Constr.	0 gallons to 940,000 gallons over 940,000 gallons	N/A N/A	1.82 2.42
21				
22				
23	12 Inch Meter - All Classes except Constr.	0 gallons to 1,660,000 gallons over 1,660,000 gallons	N/A N/A	1.82 2.42
24				
25				
26				
27	Bulk Water	All Gallons	N/A	1.47
28				
29				
30	Construction- Hydrants	All gallons	\$ 2.50	\$ 2.42
31				(0.080)
32				-3.20%
33				
34				
35				
36				
37				
38				

Litchfield Park Service Company - Water Division
Changes in Representative Rate Schedules
Test Year Ended September 30, 2008

Exhibit
Rebuttal Schedule H-3
Page 3
Witness: Bourassa

Line		Present	Proposed
No.	<u>Other Service Charges</u>	<u>Rates</u>	<u>Rates</u>
1	Establishment (Regular Hours) per Rule R14-2-403D (a)	\$ 20.00	\$ 20.00
2	Establishment (After Hours) per Rule R14-2-403D (a)	\$ 40.00	\$ 40.00
3	Re-Establishment of Service per Rule R14-2-403D (a)	(b)	(b)
4	Reconnection (Regular Hours) per Rule R14-2-403D (a)	\$ 50.00	\$ 50.00
5	Reconnection (After Hours) per Rule R14-2-403D (a)	\$ 65.00	\$ 65.00
6	Meter Test (if correct) per Rule R14-2-408F (c)	\$ 25.00	\$ 25.00
7	Meter Reread per Rule R14-2-408C (if correct)	\$ 5.00	\$ 5.00
8	NSF Check per Rule R14-2-409F (a)	\$ 20.00	\$ 20.00
9	Deferred Payment, Per Month	1.50%	1.50%
10	Late Charge	(d)	(d)
11	Service Calls - Per Hour/After Hours(e)	\$ 40.00	\$ 40.00
12	Deposit Requirements	(f)	(f)
13	Deposit Interest	3.50%	3.50%
14	Meter and Service lines	see H-3, page 4	
15	Main Extension Tariff	at Cost	at Cost
16			
17			
18			
19	(a) Service charges for customers taking both water and sewer service are not duplicative.		
20	(b) Minimum charge times number of full months off the system. per Rule R14-2-403(D).		
21	(c) \$25 plus cost of test		
22	(d) Greater of \$5.00 or 1.5% of unpaid balance.		
23	(e) No charge for service calls during normal working hours.		
24	(f) Per ACC Rules R14-2-403(B) <u>Residential</u> - two times the average bill.		
25	<u>Commercial</u> - two and one-half times the average bill.		
26			
27			
28	IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM		
29	ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE		
30	TAX. PER COMMISSION RULE 14-2-409D(5).		
31			
32			
33			
34			
35			

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Meter and Service Line Charges

Exhibit
Rebuttal Schedule H-3
Page 4
Witness: Bourassa

Line
No.

1

2

Refundable Meter and Service Line Charges

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

5/8 x 3/4 Inch

3/4 Inch

1 Inch

1 1/2 Inch

2 Inch

Over 2 Inch

2 Inch / Turbine

2 Inch / Compound

3 Inch / Turbine

3 Inch / Compound

4 Inch / Turbine

4 Inch / Compound

6 Inch / Turbine

6 Inch / Compound

8 Inch & Larger

Constuction Water

N/T = No Tariff

Present

Present

Service

Line

Charge

Meter

Install-

ation

Charge

Total

Present

Charge

\$ 225.00

225.00

300.00

500.00

675.00

At Cost

NT

NT

NT

NT

NT

NT

NT

NT

NT

\$ 1,500

Proposed

Service

Line

Charge

\$ 385.00

385.00

435.00

470.00

630.00

630.00

805.00

845.00

1,170.00

1,230.00

1,730.00

1,770.00

At Cost

Proposed

Meter

Install-

ation

Charge

\$ 135.00

215.00

255.00

465.00

965.00

1,690.00

1,470.00

2,265.00

2,350.00

3,245.00

4,545.00

6,280.00

At Cost

Total

Proposed

Charge

\$ 520.00

600.00

690.00

935.00

1,595.00

2,320.00

2,275.00

3,110.00

3,520.00

4,475.00

6,275.00

8,050.00

At Cost

\$ 1,500

**BOURASSA REBUTTAL
WASTEWATER SCHEDULES
(Rate Base – Phase I)**

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Computation of Increase in Gross Revenue
Requirements As Adjusted

Exhibit
Rebuttal Schedule A-1
Page 1
Witness: Bourassa

Line

No.

1	Fair Value Rate Base	\$ 28,034,885
2		
3	Adjusted Operating Income	150,940
4		
5	Current Rate of Return	0.54%
6		
7	Required Operating Income	\$ 3,083,837
8		
9	Required Rate of Return on Fair Value Rate Base	11.00%
10		
11	Operating Income Deficiency	\$ 2,932,897
12		
13	Gross Revenue Conversion Factor	1.6286
14		
15	Increase in Gross Revenue Revenue Requirement	\$ 4,776,618
16		
17	Test Year Revenues	\$ 6,356,374
18	Increase in Gross Revenue Revenue Requirement	\$ 4,776,618
19	Proposed Revenue Requirement	\$ 11,132,993
20	% Increase	75.15%

	Present	Proposed	Dollar	Percent
<u>Customer</u>	<u>Rates</u>	<u>Rates</u>	<u>Increase</u>	<u>Increase</u>
23 <u>Classification</u>				
24 Residential	\$ 4,647,120	\$ 8,236,679	\$ 3,589,559	77.24%
25 Residential HOA	266,016	471,494	205,478	77.24%
26 Multi-unit Housing	518,888	919,818	400,931	77.27%
27 Small Commercial	84,318	149,463	65,145	77.26%
28 Measured Service:				
29 Regular Domestic	256,547	454,904	198,357	77.32%
30 Rest., Motels, Grocery, Dry Cleaning	222,936	395,322	172,386	77.33%
31 Wigwam Resort	115,929	205,502	89,573	77.27%
32 School	76,320	135,277	58,957	77.25%
33 Effluent	92,268	92,268	-	0.00%
34 Subtotal before Rev. Annualization	\$ 6,280,340	\$ 11,060,726	\$ 4,780,386	76.12%
35				
36 Revenue Annualization	\$ (27,512)	\$ (28,724)	\$ (1,213)	4.41%
37 Misc Revenues	99,755	99,755	-	0.00%
38 Reconciling Amount H-1 to C-1	3,791	1,236	(2,555)	-67.40%
39				
40 Total of Water Revenues	\$ 6,356,375	\$ 11,132,992	\$ 4,776,618	75.15%

44 SUPPORTING SCHEDULES:

45 Rebuttal B-1
46 Rebuttal C-1
47 Rebuttal C-3
48 Rebuttal H-1

49

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Summary of Rate Base

Exhibit
Rebuttal Schedule B-1
Page 1
Witness: Bourassa

Line No.		Original Cost Rate base	Fair Value Rate Base
1			
2	Gross Utility Plant in Service	\$ 59,833,807	\$ 59,833,807
3	Less: Accumulated Depreciation	<u>7,902,675</u>	<u>7,902,675</u>
4			
5	Net Utility Plant in Service	\$ 51,931,132	\$ 51,931,132
6			
7	<u>Less:</u>		
8	Advances in Aid of		
9	Construction	6,989,559	6,989,559
10	Contributions in Aid of		
11	Construction	18,643,786	18,643,786
12	Accumulated Amortization of CIAC	(2,072,117)	(2,072,117)
13			
14	Customer Meter Deposits	0	0
15	Deferred Income Taxes & Credits	335,020	335,020
16		-	-
17			
18			
19	<u>Plus:</u>		
20	Unamortized Finance		
21	Charges	-	-
22	Deferred Finance Charges	-	-
23	Allowance for Working Capital	-	-
24			
25			
26	Total Rate Base	<u>\$ 28,034,885</u>	<u>\$ 28,034,885</u>
27			
28			
29			
30	<u>SUPPORTING SCHEDULES:</u>		
31	Rebuttal B-2		
32	Rebuttal B-5		
33			
34			
35			

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments

Exhibit
Rebuttal Schedule B-2
Page 1
Witness: Bourassa

Line No.		Actual at End of Test Year	Proforma Adjustments Amount	Adjusted at end of Test Year
1	Gross Utility			
2	Plant in Service	\$ 60,394,260	(560,453)	\$ 59,833,807
3				
4	Less:			
5	Accumulated			
6	Depreciation	8,475,991	(573,316)	7,902,675
7				
8				
9	Net Utility Plant			
10	in Service	\$ 51,918,269		\$ 51,931,132
11				
12	Less:			
13	Advances in Aid of			
14	Construction	7,006,208	(16,649)	6,989,559
15				
16	Contributions in Aid of			
17	Construction (CIAC)	18,737,132	(93,346)	18,643,786
18				
19	Accumulated Amortization of CIAC	(2,072,117)	-	(2,072,117)
20				
21	Customer Meter Deposits	68,685	(68,685)	0
22	Deferred Income Taxes	15,987	319,033	335,020
23				
24				
25	Plus:			
26	Unamortized Finance			
27	Charges	-	-	-
28	Deferred Finance Chgs	134,528	(134,528)	-
29	Allowance for Working Capital	-	-	-
30				
31	Total	<u>\$ 28,296,903</u>		<u>\$ 28,034,885</u>

SUPPORTING SCHEDULES:
Rebuttal B-2, page 2

RECAP SCHEDULES:
Rebuttal B-1

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments

Exhibit
Rebuttal Schedule B-2
Page 2
Witness: Bourassa

Line No.	Description	Actual at End of Test Year	Proforma Adjustments						Adjusted at end of Test Year
			1	2	3	4	5	6	
			Plant	Accum. Depr.	DIT	AIAC/CIAC	Remove Security Deposit	Debt Issuance Costs	
1	Gross Utility Plant in Service	\$ 60,394,260	(560,453)						\$ 59,833,807
2									
3									
4	Less:								
5	Accumulated Depreciation	8,475,991		(573,316)					7,902,675
6									
7									
8									
9	Net Utility Plant in Service	\$ 51,918,269	\$ (560,453)	\$ 573,316	\$ -	\$ -	\$ -	\$ -	\$ 51,931,132
10									
11									
12	Less:								
13	Advances in Aid of Construction	7,006,208				(16,649)			6,989,559
14									
15									
16	Contributions in Aid of Construction (CIAC)	18,737,132				(93,346)			18,643,786
17									
18									
19	Accumulated Amort of CIAC	(2,072,117)							(2,072,117)
20									
21	Customer Meter Deposits	68,685					(68,685)		0
22	Deferred Income Taxes	15,987			319,033				335,020
23									
24									
25	Plus:								
26	Unamortized Finance Charges	-							-
27									
28	Deferred Finance Chgs	134,528						(134,528)	-
29	Allowance for Working Capital	-							-
30									
31	Total	\$ 28,296,903	\$ (560,453)	\$ 573,316	\$ (319,033)	\$ 109,995	\$ 68,685	\$ (134,528)	\$ 28,034,885
32									
33									
34									
35									
36									
37									

SUPPORTING SCHEDULES:

B-2, pages 3-6
E-1

RECAP SCHEDULES:

B-1

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1

Exhibit
Rebuttal Schedule B-2
Page 3
Witness: Bourassa

Line No.	Plant-in-Service	Acct. No.	Description	Adjusted Original Cost	A Plant Retirements	B Odor Control Unit	C Capitalized Expenses	D Remove Office Rent	E Intentionally Left Blank	Rebuttal Adjusted Original Cost
1	Plant-in-Service									
2										
3										
4										
5		351	Organization	1,783,426						1,783,426
6		353	Land	19,319,421	(388,834)					18,941,384
7		354	Structures & Improvements	543,670						548,674
8		355	Power Generation	1,161,105						1,161,105
9		360	Collection Sewer Forced	23,113,391	(18,730)					23,094,661
10		361	Collection Sewers Gravity	-						-
11		362	Special Collecting Structures	-						-
12		363	Customer Services	-						-
13		364	Flow Measuring Devices	47,019						47,019
14		366	Reuse Services	3,789,468						3,789,468
15		367	Reuse Meters and Installation	52,331						52,331
16		370	Receiving Wells	860,393						860,393
17		371	Pumping Equipment	1,858,411	(103,992)		6,394			1,760,813
18		374	Reuse Distribution Reservoirs	62,825						62,825
19		375	Reuse Trans. and Dist. System	414,315		(38,250)				414,315
20		380	Treatment & Disposal Equip.	5,469,478						5,431,228
21		381	Plant Sewers	47,788						47,788
22		382	Outfall Sewer Lines	343,681						343,681
23		389	Other Sewer Plant & Equip.	644,609	(43,421)					611,767
24		390	Office Furniture & Equipment	198,772			10,579			198,772
25		390.1	Computers and Software	-						-
26		391	Transportation Equipment	26,078						26,078
27		392	Stores Equipment	8,968						8,968
28		393	Tools, Shop And Garage Equip	56,167						56,167
29		394	Laboratory Equip	173,948						173,948
30		396	Communication Equip	418,996						418,996
31		398	Other Tangible Plant	-						-
32				-						-
33				-						-
34				-						-
35			TOTALS	\$ 60,394,260	\$ (554,977)	\$ (38,250)	\$ 25,702	\$ 7,072	\$ -	\$ 59,833,807
36										
37			Adjusted Plant-in-Service per Direct							\$ 60,394,260
38										
39			Increase (decrease) in Plant-in-Service							\$ (560,453)
40										
41			Adjustment to Plant-in-Service							\$ (560,453)
42										
43			SUPPORTING SCHEDULES							
44			Rebuttal B-2, pages 3.1-3.3							
45			Rebuttal B-2, pages 3.4-3.15							

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1- A

Exhibit
Rebuttal Schedule B-2
Page 3.1
Witness: Bourassa

Line
No.

1	<u>Plant Retirements</u>	
2		
3	354 - Structures and Improvements	\$ (388,834)
4	361 - Collection Sewer - Gravity	(18,730)
5	371 - Pumping Equipment	(103,992)
6	389 - Other Plant and Miscellaneous Equipment	<u>(43,421)</u>
7		
8	Increase (Decrease) in Plant-in-Service	<u>\$ (554,977)</u>
9		
10		
11	For related AIAC and CIAC see Rebuttal Schedule B-2, page 6	
12		
13		
14		
15		
16	See Staff Adjustment 1 Schedule JMM-WW5 (from Exhibit MSJ Table G-1)	

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1- B

Exhibit
Rebuttal Schedule B-2
Page 3.2
Witness: Bourassa

Line
No.

1	<u>Transfer of Odor Control Unit to Black Mountain Sewer Company ("BMSC")</u>	
2		
3	Original Cost of Odor Control Unit	\$ (38,250)
4		
5		
6		
7		
8	Increase (Decrease) in Plant-in-Service	<u>\$ (38,250)</u>
9		
10		
11		
12		
13		
14		
15		
16	See Staff Adjustment 2 Schedule JMM-WW6	
17	(Actual cost is \$38,250 per updated documentation not \$38,625)	
18		

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1- C

Exhibit
Rebuttal Schedule B-2
Page 3.3
Witness: Bourassa

Line

No.

1	<u>Capitalized Expenses</u>		
2			
3	354 - Structures and Improvements - Dean Fence and Gate (fence)	\$	3,725
4	355 - Power Generation Equipment - Loftin Equipment Co. (generator duct)		5,004
5	371 - Pumping Equipment - Precision Electric (install rebuilt pump)	\$	1,530
6	371 - Pumping Equipment - Precision Electric (new reinforced strainer baskets)		4,864
7	Total 371 - Pumping Equipment		6,394
8	389 - Other Plant and Misc. Equip. - Keogh Engineering (odor monitor site plant and pole mnt)	\$	1,450
9	389 - Other Plant and Misc. Equip. - Keogh Engineering (odor monitor legal descr. & map)		550
10	389 - Other Plant and Misc. Equip. - Keogh Engineering (filter system repair)		8,054
11	389 - Other Plant and Misc. Equip. - Keogh Engineering (work on UV system)		525
12	Total 389 - Other Plant and Misc. Equip.		10,579
13			
14	Increase (Decrease) in Plant-in-Service		<u>\$ 25,702</u>
15			
16			
17			
18			
19			
20	See testimony		
21			
22			

Litchfield Park Service Company - Wastewater Division
Plant Additions and Retirements

Exhibit
 Rebuttal Schedule B-2
 Page 3.4

Account	Description	Deprec. Rate Before Nov-02	Deprec. Rate After Nov-02	Plant At 12/31/2000	2000 Accum. Depr.	2001 Plant Additions	2001 Plant Adjustments	2001 Adjusted Plant Additions	2001 Plant Retirements	2001 Salvage A/D Only	2001 Plant Balance	2001 Deprec.
351	Organization	0.00%	0.00%	-	-	-	-	-	-	-	-	-
353	Land	0.00%	0.00%	-	-	-	-	-	-	-	1,742,400	-
354	Structures & Improvements	2.52%	3.33%	-	-	-	-	-	-	-	-	-
355	Power Generation	2.52%	5.00%	21,372	269	-	-	-	-	-	21,372	539
360	Collection Sewer Forced	2.52%	2.00%	555,955	33,704	-	-	-	-	-	555,955	14,010
361	Collection Sewers Gravity	2.52%	2.00%	5,446,466	716,003	-	-	-	-	-	6,954,989	156,258
362	Special Collecting Structures	2.52%	2.00%	1,508,523	-	-	1,508,523	1,508,523	(1,508,523)	-	-	-
363	Customer Services	2.52%	2.00%	-	-	-	-	-	-	-	-	-
364	Flow Measuring Devices	2.52%	10.00%	11,020	417	-	-	-	-	-	11,020	278
366	Reuse Services	2.52%	2.00%	370,964	12,316	472,540	-	472,540	-	-	843,504	15,302
367	Reuse Meters And Installation	2.52%	8.33%	-	-	-	-	-	-	-	-	-
370	Receiving Walls	2.52%	3.33%	-	-	-	-	-	-	-	-	-
371	Pumping Equipment	2.52%	12.50%	-	-	-	-	-	-	-	-	-
374	Reuse Distribution Reservoirs	2.52%	2.50%	-	-	-	-	-	-	-	-	-
375	Reuse Trans. and Dist. System	2.52%	2.50%	-	-	-	-	-	-	-	-	-
380	Treatment & Disposal Equipment	2.52%	5.00%	-	-	-	-	-	-	-	-	-
381	Plant Sewers	2.52%	5.00%	-	-	-	-	-	-	-	-	-
382	Outfall Sewer Lines	2.52%	3.33%	-	-	-	-	-	-	-	-	-
389	Other Sewer Plant. & Equipment	2.52%	6.67%	5,508	1,569	-	-	-	-	-	5,508	139
390	Office Furniture & Equipment	2.52%	6.67%	29,620	2,495	1,769	-	1,769	-	-	31,390	769
390.1	Computers and Software	2.52%	20.00%	-	-	-	-	-	-	-	-	-
391	Transportation Equipment	2.52%	20.00%	225	9	-	-	-	-	-	225	6
392	Stores Equipment	2.52%	4.00%	-	-	-	-	-	-	-	-	-
393	Tools, Shop And Garage Equip	2.52%	5.00%	-	-	-	-	-	-	-	-	-
394	Laboratory Equip	2.52%	10.00%	-	-	-	-	-	-	-	-	-
396	Communication Equip	2.52%	10.00%	-	-	-	-	-	-	-	-	-
398	Other Tangible Plant (Goodyear Capacity)	2.52%	4.00%	4,460,750	614,247	-	-	-	-	-	4,460,750	112,411
	Plant Held for Future Use (Land)	0.00%	0.00%	-	-	-	-	-	-	-	-	-
	Rounding			-	-	-	-	-	-	-	-	-

Plant Held for Future Use
 TOTAL WATER PLANT

12,410,403	1,381,028	474,310	1,742,400	2,216,710	-	-	14,627,113	299,711
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(See page 3.14) (See page 3.15)

Litchfield Park Service Company - Wastewater Division
Plant Additions and Retirements

Exhibit
Rebuttal Schedule B-2
Page 3.5

Account No.	Description	Deprec. Rate Before Nov-02	Deprec. Rate After Nov-02	2002 Plant Additions	Goodyear Trmt Plant 2002 Plant Adjustments	Adjusted Plant Additions	2002 Plant Retirements	2002 Salvage/Adj. A/D Only	2002 Plant Balance	2002 Deprec.
351	Organization	0.00%	0.00%	-	-	-	-	-	1,742,400	-
353	Land	0.00%	0.00%	-	-	-	-	-	8,426,565	-
354	Structures & Improvements	2.52%	3.33%	8,426,565	-	8,426,565	-	-	220,336	109,019
355	Power Generation	2.52%	5.00%	198,964	-	198,964	-	-	223,132	3,295
360	Collection Sewer Forced	2.52%	2.00%	-	-	-	(332,823)	-	8,201,927	9,648
361	Collection Sewers Gravity	2.52%	2.00%	1,246,938	-	1,246,938	-	-	-	187,693
362	Special Collecting Structures	2.52%	2.00%	-	-	-	-	-	-	-
363	Customer Services	2.52%	2.00%	-	-	-	-	-	-	-
364	Flow Measuring Devices	2.52%	10.00%	515	-	515	-	-	11,535	354
366	Reuse Services	2.52%	2.00%	2,558,799	-	2,558,799	-	-	3,402,302	52,577
367	Reuse Meters And Installation	2.52%	8.33%	9,573	-	9,573	-	-	9,573	144
370	Receiving Wells	2.52%	3.33%	854,000	-	854,000	-	-	854,000	11,049
371	Pumping Equipment	2.52%	12.50%	1,328,499	-	1,328,499	-	-	1,328,499	22,263
374	Reuse Distribution Reservoirs	2.52%	2.50%	-	-	-	-	-	-	-
375	Reuse Trans. and Dist. System	2.52%	2.50%	-	-	-	-	-	-	-
380	Treatment & Disposal Equipment	2.52%	5.00%	4,246,579	-	4,246,579	-	-	4,246,579	57,895
381	Plant Sewers	2.52%	5.00%	-	-	-	-	-	-	-
382	Outfall Sewer Lines	2.52%	3.33%	343,681	-	343,681	-	-	343,681	4,446
389	Other Sewer Plant & Equipment	2.52%	6.67%	6,500	-	6,500	-	-	12,008	251
390	Office Furniture & Equipment	2.52%	6.67%	62,625	-	62,625	-	-	94,014	1,797
390.1	Computers and Software	2.52%	20.00%	-	-	-	-	-	-	-
391	Transportation Equipment	2.52%	20.00%	-	-	-	-	-	225	9
392	Stores Equipment	2.52%	4.00%	8,807	-	8,807	-	-	8,807	116
393	Tools, Shop And Garage Equip	2.52%	5.00%	13,557	-	13,557	-	-	13,557	185
394	Laboratory Equip	2.52%	10.00%	77,786	-	77,786	-	-	77,786	1,223
396	Communication Equip	2.52%	10.00%	320,224	-	320,224	-	-	320,224	5,033
398	Other Tangible Plant (Goodyear Capacity)	2.52%	4.00%	-	\$ (4,460,750)	(4,460,750)	-	-	-	(726,698)
	Plant Held for Future Use (Land)	0.00%	0.00%	-	-	-	-	-	-	-
	Rounding			-	-	-	-	-	-	-
Plant Held for Future Use										
TOTAL WATER PLANT				19,703,612	(4,460,750)	15,242,862	(332,823)	-	29,537,152	(259,660)

Litchfield Park Service Company - Wastewater Division
Plant Additions and Retirements

Exhibit
Rebuttal Schedule B-2
Page 3.6

Account	No.	Description	Deprec. Rate Before Nov-02	Deprec. Rate After Nov-02	2003 Plant Additions	2003 Plant Adjustments	2003 Adjusted Plant Additions	2003 Plant Retirements	2003 Salvage A/D Only	2003 Plant Balance	2003 Deprec.
351		Organization	0.00%	0.00%	-	-	-	-	-	-	-
353		Land	0.00%	0.00%	-	-	-	-	-	1,742,400	-
354		Structures & Improvements	2.52%	3.33%	16,292	-	16,292	-	-	8,442,857	280,876
355		Power Generation	2.52%	5.00%	-	-	-	-	-	220,336	11,017
360		Collection Sewer Forced	2.52%	2.00%	-	-	-	-	-	223,132	4,463
361		Collection Sewers Gravity	2.52%	2.00%	35,691	-	35,691	-	-	8,237,618	164,395
362		Special Collecting Structures	2.52%	2.00%	-	-	-	-	-	-	-
363		Customer Services	2.52%	2.00%	-	-	-	-	-	-	-
364		Flow Measuring Devices	2.52%	10.00%	-	-	-	-	-	11,535	1,153
366		Reuse Services	2.52%	2.00%	35,028	-	35,028	-	-	3,437,330	68,396
367		Reuse Meters And Installation	2.52%	6.33%	3,806	-	3,806	-	-	13,378	956
370		Receiving Wells	2.52%	3.33%	1,200	-	1,200	-	-	855,200	28,458
371		Pumping Equipment	2.52%	12.50%	4,702	-	4,702	-	-	1,333,201	166,356
374		Reuse Distribution Reservoirs	2.52%	2.50%	-	-	-	-	-	-	-
375		Reuse Trans. and Dist. System	2.52%	2.50%	-	-	-	-	-	-	-
380		Treatment & Disposal Equipment	2.52%	5.00%	-	-	-	-	-	4,246,579	212,329
381		Plant Sewers	2.52%	5.00%	23,117	-	23,117	-	-	23,117	578
382		Outfall Sewer Lines	2.52%	3.33%	-	-	-	-	-	343,681	11,445
389		Other Sewer Plant & Equipment	2.52%	6.67%	1,059	-	1,059	-	-	13,067	836
390		Office Furniture & Equipment	2.52%	6.67%	13,032	-	13,032	-	-	107,046	6,705
390.1		Computers and Software	2.52%	20.00%	-	-	-	-	-	-	-
391		Transportation Equipment	2.52%	20.00%	-	-	-	-	-	225	45
392		Stores Equipment	2.52%	4.00%	-	-	-	-	-	8,807	352
393		Tools, Shop And Garage Equip	2.52%	5.00%	5,189	-	5,189	-	-	18,746	808
394		Laboratory Equip	2.52%	10.00%	2,281	-	2,281	-	-	80,067	7,893
396		Communication Equip	2.52%	10.00%	2,875	-	2,875	-	-	323,100	32,166
398		Other Tangible Plant (Goodyear Capacity)	2.52%	4.00%	-	-	-	-	-	-	-
		Plant Held for Future Use (Land)	0.00%	0.00%	-	-	-	-	-	-	-
		Rounding			-	-	-	-	-	-	-

Plant Held for Future Use
TOTAL WATER PLANT

144,272	-	144,272	-	29,681,424	999,228
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Mitchell Park Service Company - Wastewater Division
Plant Additions and Retirements

Exhibit
Rebuttal Schedule B-2
Page 3.7

Account No.	Description	Deprec. Rate Before Nov-02	Deprec. Rate After Nov-02	2004 Plant Additions	2004 Plant Adjustments ¹	2004 Adjusted Plant Additions	2004 Plant Retirements	2004 Salvage A/D Only	2004 Plant Balance	2004 Deprec.
351	Organization	0.00%	0.00%	41,026	-	41,026	-	-	1,783,426	-
353	Land	0.00%	0.00%	634,988	-	634,988	-	-	9,046,041	291,190
354	Structures & Improvements	2.52%	3.33%	85,152	(31,804)	53,348	-	-	305,488	13,146
355	Power Generation	2.52%	5.00%	40,504	(11,360)	29,145	-	-	252,277	4,754
360	Collection Sewer Forced	2.52%	2.00%	5,765,446	(51,113)	5,714,334	-	-	13,951,952	221,896
361	Collection Sewers Gravity	2.52%	2.00%	-	-	-	-	-	-	-
362	Special Collecting Structures	2.52%	2.00%	-	-	-	-	-	-	-
363	Customer Services	2.52%	2.00%	-	-	-	-	-	-	-
364	Flow Measuring Devices	2.52%	10.00%	10,653	-	10,653	-	-	22,188	1,686
366	Reuse Services	2.52%	2.00%	17,461	-	17,461	-	-	3,454,791	68,921
367	Reuse Meters And Installation	2.52%	8.33%	-	-	-	-	-	13,378	1,114
370	Receiving Wells	2.52%	3.33%	-	-	-	-	-	855,200	26,478
371	Pumping Equipment	2.52%	12.50%	31,621	(604)	31,017	-	-	1,364,219	168,589
374	Reuse Distribution Reservoirs	2.52%	2.50%	-	-	-	-	-	-	-
375	Reuse Trans. and Dist. System	2.52%	2.50%	-	-	-	-	-	-	-
380	Treatment & Disposal Equipment	2.52%	5.00%	53,622	(1,063)	52,559	-	-	4,299,138	213,643
381	Plant Sewers	2.52%	5.00%	-	-	-	-	-	23,117	1,156
382	Outfall Sewer Lines	2.52%	3.33%	-	-	-	-	-	343,681	11,445
389	Other Sewer Plant & Equipment	2.52%	6.67%	97,241	(11,334)	85,907	-	-	98,974	3,737
390	Office Furniture & Equipment	2.52%	6.67%	19,825	-	19,825	-	-	126,871	7,801
390.1	Computers and Software	2.52%	20.00%	-	-	-	-	-	-	-
391	Transportation Equipment	2.52%	20.00%	-	-	-	-	-	225	45
392	Stores Equipment	2.52%	4.00%	-	-	-	-	-	8,807	352
393	Tools, Shop And Garage Equip	2.52%	5.00%	-	-	-	-	-	18,746	937
394	Laboratory Equip	2.52%	10.00%	4,092	-	4,092	-	-	84,159	8,211
396	Communication Equip	2.52%	10.00%	2,312	-	2,312	-	-	325,412	32,426
398	Other Tangible Plant (Goodyear Capacity)	2.52%	4.00%	-	-	-	-	-	-	-
	Plant Held for Future Use (Land)	0.00%	0.00%	-	-	-	-	-	-	-
	Rounding			-	-	-	-	-	-	-

Plant Held for Future Use
TOTAL WATER PLANT

6,803,943	(107,278)	6,696,665	-	36,378,089	1,079,527
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¹ Affiliate Profit

Litchfield Park Service Company - Wastewater Division
Plant Additions and Retirements

Exhibit
 Rebuttal Schedule B-2
 Page 3.8

Account	No.	Description	Deprec. Rate Before Nov-02	Deprec. Rate After Nov-02	2005 Plant Additions	2005 Plant Adjustments ¹	2005 Adjusted Plant Additions	2005 Plant Retirements	2005 Salvage A/D Only	2005 Plant Balance	2005 Deprec.
351		Organization	0.00%	0.00%	-	-	-	-	-	1,783,426	-
353		Land	0.00%	0.00%	-	-	-	-	-	9,424,327	-
354		Structures & Improvements	2.52%	3.33%	392,473	(14,187)	378,286	-	-	307,532	307,532
355		Power Generation	2.52%	5.00%	-	-	-	-	-	305,488	15,274
360		Collection Sewer Forced	2.52%	2.00%	80,546	(7,843)	72,702	-	-	324,979	5,773
361		Collection Sewers Gravity	2.52%	2.00%	4,818,977	(135,919)	4,683,058	-	-	18,635,010	325,870
362		Special Collecting Structures	2.52%	2.00%	-	-	-	-	-	-	-
363		Customer Services	2.52%	2.00%	-	-	-	-	-	-	-
364		Flow Measuring Devices	2.52%	10.00%	17,896	(341)	17,555	-	-	39,743	3,097
366		Reuse Services	2.52%	2.00%	3,187	-	3,187	-	-	3,457,977	69,128
367		Reuse Meters And Installation	2.52%	8.33%	-	-	-	-	-	13,378	1,114
370		Receiving Wells	2.52%	3.33%	4,917	-	4,917	-	-	860,117	28,560
371		Pumping Equipment	2.52%	12.50%	112,737	(11,712)	101,025	-	-	1,465,243	176,841
374		Reuse Distribution Reservoirs	2.52%	2.50%	-	-	-	-	-	-	-
375		Reuse Trans. and Dist. System	2.52%	2.50%	-	-	-	-	-	-	-
380		Treatment & Disposal Equipment	2.52%	5.00%	222,515	(872)	221,642	-	-	4,520,781	220,498
381		Plant Sewers	2.52%	5.00%	-	-	-	-	-	23,117	1,156
382		Outfall Sewer Lines	2.52%	3.33%	-	-	-	-	-	343,681	11,445
389		Other Sewer Plant & Equipment	2.52%	6.67%	207,463	(1,715)	205,748	-	-	304,722	13,463
390		Office Furniture & Equipment	2.52%	6.67%	10,431	-	10,431	-	-	137,301	8,810
390.1		Computers and Software	2.52%	20.00%	-	-	-	-	-	-	-
391		Transportation Equipment	2.52%	20.00%	9,314	-	9,314	-	-	-	-
392		Stores Equipment	2.52%	4.00%	-	-	-	-	-	9,540	976
393		Tools, Shop And Garage Equip	2.52%	5.00%	13,641	-	13,641	-	-	8,807	352
394		Laboratory Equip	2.52%	10.00%	-	-	-	-	-	32,387	1,278
395		Communication Equip	2.52%	10.00%	-	-	-	-	-	84,159	8,416
398		Other Tangible Plant (Goodyear Capacity)	2.52%	4.00%	-	-	-	-	-	325,412	32,541
		Plant Held for Future Use (Land)	0.00%	0.00%	-	-	-	-	-	-	-
		Rounding			-	-	-	-	-	-	-
Plant Held for Future Use											
TOTAL WATER PLANT											
					5,894,095	(172,590)	5,721,506	-	-	42,099,595	1,232,124

¹ Affiliate Profit

Litchfield Park Service Company - Wastewater Division
Plant Additions and Retirements

Exhibit
Rebuttal Schedule B-2
Page 3.9

Account No.	Description	Deprec. Rate Before Nov-02	Deprec. Rate After Nov-02	2006 Plant Additions	2006 Plant Adjustments ¹	2006 Adjusted Plant Additions	2006 Plant Retirements	2006 Salvage AD Only	2006 Plant Balance	2006 Deprec.
351	Organization	0.00%	0.00%	-	-	-	-	-	-	-
353	Land	0.00%	0.00%	-	-	-	-	-	-	-
354	Structures & Improvements	2.52%	3.33%	1,585,531	(1,378)	1,584,153	-	-	1,783,426	-
355	Power Generation	2.52%	5.00%	132,105	-	132,105	-	-	11,008,480	340,206
360	Collection Sewer Forced	2.52%	2.00%	756,548	(268)	756,280	-	-	437,593	18,577
361	Collection Sewers Gravity	2.52%	2.00%	569,086	(78,415)	490,670	-	-	1,081,259	14,062
362	Special Collecting Structures	2.52%	2.00%	-	-	-	-	-	19,125,681	377,607
363	Customer Services	2.52%	2.00%	-	-	-	-	-	-	-
364	Flow Measuring Devices	2.52%	10.00%	4,961	-	4,961	-	-	44,704	4,222
366	Reuse Services	2.52%	2.00%	-	-	-	-	-	3,457,977	69,160
367	Reuse Meters And Installation	2.52%	8.33%	-	-	-	-	-	13,378	1,114
370	Receiving Wells	2.52%	3.33%	-	-	-	-	-	860,117	28,642
371	Pumping Equipment	2.52%	12.50%	11,189	(568)	10,621	-	-	1,475,864	183,819
374	Reuse Distribution Reservoirs	2.52%	2.50%	-	-	-	-	-	-	-
375	Reuse Trans. and Dist. System	2.52%	2.50%	-	-	-	-	-	-	-
380	Treatment & Disposal Equipment	2.52%	5.00%	104,008	(4,522)	99,487	-	-	4,620,267	228,526
381	Plant Sewers	2.52%	5.00%	-	-	-	-	-	23,117	1,156
382	Outfall Sewer Lines	2.52%	3.33%	-	-	-	-	-	343,681	11,445
389	Other Sewer Plant & Equipment	2.52%	6.67%	11,685	(443)	11,242	-	-	315,963	20,700
390	Office Furniture & Equipment	2.52%	6.67%	9,956	-	9,956	-	-	147,257	9,490
390.1	Computers and Software	2.52%	20.00%	-	-	-	-	-	-	-
391	Transportation Equipment	2.52%	20.00%	6,193	-	6,193	-	-	15,733	2,527
392	Stores Equipment	2.52%	4.00%	161	-	161	-	-	8,968	355
393	Tools, Shop And Garage Equip	2.52%	5.00%	-	-	-	-	-	32,387	1,619
394	Laboratory Equip	2.52%	10.00%	5,277	-	5,277	-	-	89,436	8,680
396	Communication Equip	2.52%	10.00%	-	-	-	-	-	325,412	32,541
398	Other Tangible Plant (Goodyear Capacity)	2.52%	4.00%	-	-	-	-	-	-	-
	Plant Held for Future Use (Land)	0.00%	0.00%	-	-	-	-	-	-	-
	Rounding			-	-	-	-	-	-	-

Plant Held for Future Use
TOTAL WATER PLANT

3,196,701	(85,595)	3,111,106	-	45,210,701	1,354,449
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¹ Affiliate Profit

Litchfield Park Service Company - Wastewater Division
Plant Additions and Retirements

Exhibit
 Rebuttal Schedule B-2
 Page 3.10

Account No.	Description	Deprec. Rate		2007 Plant		2007 Plant		2007 Salvage A/D Only	2007 Plant Balance	2007 Deprec.
		Before Nov-02	After Nov-02	Additions	Adjustments ¹	Adjusted Plant	Retirements			
351	Organization	0.00%	0.00%	-	-	-	-	-	1,783,426	-
353	Land	0.00%	0.00%	-	-	-	-	-	10,974,659	366,019
354	Structures & Improvements	2.52%	3.33%	23,919	(57,739)	(33,821)	-	-	543,475	24,527
355	Power Generation	2.52%	5.00%	105,882	-	105,882	-	-	1,091,693	21,730
360	Collection Sewer Forced	2.52%	2.00%	10,434	-	10,434	-	-	20,252,859	393,785
361	Collection Sewers Gravity	2.52%	2.00%	1,229,391	(102,212)	1,127,179	-	-	-	-
362	Special Collecting Structures	2.52%	2.00%	-	-	-	-	-	-	-
363	Customer Services	2.52%	2.00%	-	-	-	-	-	-	-
364	Flow Measuring Devices	2.52%	10.00%	2,315	-	2,315	-	-	47,019	4,586
366	Reuse Services	2.52%	2.00%	210,273	(665)	209,609	-	-	3,667,586	71,256
367	Reuse Meters And Installation	2.52%	8.33%	-	-	-	-	-	13,378	1,114
370	Receiving Wells	2.52%	3.33%	277	-	277	-	-	860,393	28,646
371	Pumping Equipment	2.52%	12.50%	55,130	(70)	55,060	-	-	1,530,924	187,924
374	Reuse Distribution Reservoirs	2.52%	2.50%	62,625	-	62,625	-	-	62,625	783
375	Reuse Trans. and Dist. System	2.52%	2.50%	-	-	-	-	-	-	-
380	Treatment & Disposal Equipment	2.52%	5.00%	547,598	(11,615)	535,983	-	-	5,156,250	244,413
381	Plant Sewers	2.52%	5.00%	-	-	-	-	-	23,117	1,156
382	Outfall Sewer Lines	2.52%	3.33%	-	-	-	-	-	343,681	11,445
389	Other Sewer Plant & Equipment	2.52%	6.67%	83,941	(1,357)	82,584	-	-	398,547	23,829
390	Office Furniture & Equipment	2.52%	20.00%	37,215	-	37,215	-	-	184,473	11,063
390.1	Computers and Software	2.52%	20.00%	-	-	-	-	-	-	-
391	Transportation Equipment	2.52%	20.00%	3,460	-	3,460	-	-	19,193	3,493
392	Stores Equipment	2.52%	4.00%	-	-	-	-	-	8,968	359
393	Tools, Shop And Garage Equip	2.52%	5.00%	3,053	-	3,053	-	-	35,440	1,696
394	Laboratory Equip	2.52%	10.00%	83,968	-	83,968	-	-	173,405	13,142
396	Communication Equip	2.52%	10.00%	-	-	-	-	-	325,412	32,541
398	Other Tangible Plant (Goodyear Capacity)	2.52%	4.00%	-	-	-	-	-	-	-
	Plant Held for Future Use (Land)	0.00%	0.00%	-	-	-	-	-	-	-
	Rounding									
Plant Held for Future Use				2,459,482	(173,659)	2,285,823	-	-	47,486,524	1,443,506
TOTAL WATER PLANT										

¹ Affiliate Profit

Mitchfield Park Service Company - Wastewater Division
Plant Additions and Retirements

Exhibit
 Rebuttal Schedule B-2
 Page 3.11

Account No.	Description	Deprec. Rate Before Nov-02	Deprec. Rate After Nov-02	Jan. to Sep. 2008 Plant Additions	Jan. to Sep. 2008 Plant Adjustments ¹	Capitalized Expenses	Jan. to Sep. 2008 Adjusted Plant Additions	Staff Plant Retirements	Transferred Odor Control Unit	A/D Lift Station Decommission	Transferred Odor Control Unit A/D	Jan. to Sep. 2008 Plant Balance	Jan. to Sep. 2008 Deprec.
351	Organization	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
353	Land	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
354	Structures & Improvements	2.52%	3.33%	8,402,971	(58,210)	3,725	8,348,487	(388,834)	-	(8,003)	1,783,426	18,934,312	378,344
355	Power Generation	2.52%	5.00%	195	-	5,004	5,199	-	-	-	-	546,674	20,478
360	Collection Sewer Forced	2.52%	2.00%	69,566	(154)	-	69,412	-	-	-	-	1,161,105	16,896
361	Collection Sewers Gravity	2.52%	2.00%	2,897,310	(36,779)	-	2,860,532	(18,730)	-	-	-	23,094,661	325,247
362	Special Collecting Structures	2.52%	2.00%	-	-	-	-	-	-	-	-	-	-
363	Customer Services	2.52%	2.00%	-	-	-	-	-	-	-	-	-	-
364	Flow Measuring Devices	2.52%	10.00%	-	-	-	-	-	-	-	-	-	-
366	Reuse Services	2.52%	2.00%	122,768	(886)	-	121,881	-	-	-	-	47,019	3,526
367	Reuse Meters And Installation	2.52%	8.33%	38,953	-	-	38,953	-	-	-	-	3,789,468	55,928
370	Receiving Wells	2.52%	3.33%	-	-	-	-	-	-	-	-	52,331	2,053
371	Pumping Equipment	2.52%	12.50%	328,661	(1,174)	6,394	333,881	(103,992)	-	-	-	860,393	21,488
374	Reuse Distribution Reservoirs	2.52%	2.50%	200	-	-	200	-	-	-	-	1,760,813	159,175
375	Reuse Trans. and Dist. System	2.52%	2.50%	414,315	-	-	414,315	-	-	-	-	62,825	1,176
380	Treatment & Disposal Equipment	2.52%	5.00%	313,338	(111)	-	313,227	-	(38,250)	-	(11,040)	414,315	3,884
381	Plant Sewers	2.52%	5.00%	24,893	(222)	-	24,671	-	-	-	-	5,431,228	199,232
382	Outfall Sewer Lines	2.52%	3.33%	-	-	-	-	-	-	-	-	47,788	1,329
389	Other Sewer Plant & Equipment	2.52%	6.67%	260,567	(14,506)	10,579	256,641	(43,421)	-	-	-	343,681	8,583
390	Office Furniture & Equipment	2.52%	6.67%	14,299	-	-	14,299	-	-	-	-	611,767	26,357
390.1	Computers and Software	2.52%	20.00%	-	-	-	-	-	-	-	-	196,772	9,586
391	Transportation Equipment	2.52%	20.00%	6,885	-	-	6,885	-	-	-	-	-	-
392	Stores Equipment	2.52%	4.00%	-	-	-	-	-	-	-	-	26,078	3,395
393	Tools, Shop And Garage Equip	2.52%	5.00%	20,727	-	-	20,727	-	-	-	-	8,968	269
394	Laboratory Equip	2.52%	10.00%	544	-	-	544	-	-	-	-	56,167	1,718
396	Communication Equip	2.52%	10.00%	93,585	-	-	93,585	-	-	-	-	173,948	13,026
398	Other Tangible Plant (Goodyear Capacity)	2.52%	10.00%	-	-	-	-	-	-	-	-	418,996	27,915
	Plant Held for Future Use (Land)	0.00%	4.00%	-	-	-	-	-	-	-	-	-	-
	Rounding			-	-	-	-	-	-	-	-	-	-

Plant Held for Future Use
 TOTAL WATER PLANT

13,009,777	(112,041)	25,702	12,923,438	(554,977)	(8,003)	(11,040)	59,826,735	1,279,606
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¹ Affiliate Profit

Litchfield Park Service Company - Wastewater Division
Plant Additions and Retirements

Exhibit
Rebuttal Schedule B-2
Page 3.12

Account No.	Description	Deprec. Rate Before Nov-02	Deprec. Rate After Nov-02	Year End Accumulated Depreciation by Account				
				2000	2001	2002	2003	2004
351	Organization	0.00%	0.00%	-	-	-	-	-
353	Land	0.00%	0.00%	-	-	-	-	-
354	Structures & Improvements	2.52%	3.33%	-	-	109,019	389,895	681,085
355	Power Generation	2.52%	5.00%	269	808	4,103	15,120	28,266
360	Collection Sewer Forced	2.52%	2.00%	33,704	47,714	(275,462)	(270,999)	(266,245)
361	Collection Sewers Gravity	2.52%	2.00%	716,003	872,262	1,059,955	1,224,350	1,446,246
362	Special Collecting Structures	2.52%	2.00%	-	-	-	-	-
363	Customer Services	2.52%	2.00%	-	-	-	-	-
364	Flow Measuring Devices	2.52%	10.00%	417	694	1,049	2,202	3,888
366	Reuse Services	2.52%	2.00%	12,316	27,618	80,195	148,592	217,513
367	Reuse Meters And Installation	2.52%	8.33%	-	-	144	1,100	2,214
370	Receiving Wells	2.52%	3.33%	-	-	11,049	39,507	67,985
371	Pumping Equipment	2.52%	12.50%	-	-	22,263	188,620	357,208
374	Reuse Distribution Reservoirs	2.52%	2.50%	-	-	-	-	-
375	Reuse Trans. and Dist. System	2.52%	2.50%	-	-	-	-	-
380	Treatment & Disposal Equipment	2.52%	5.00%	-	-	57,895	270,224	483,867
381	Plant Sewers	2.52%	5.00%	-	-	-	578	1,734
382	Outfall Sewer Lines	2.52%	3.33%	-	-	4,446	15,891	27,336
389	Other Sewer Plant & Equipment	2.52%	6.67%	1,569	1,708	1,959	2,795	6,532
390	Office Furniture & Equipment	2.52%	6.67%	2,495	3,263	5,060	11,766	19,367
390.1	Computers and Software	2.52%	20.00%	-	-	-	-	-
391	Transportation Equipment	2.52%	20.00%	9	14	23	68	113
392	Stores Equipment	2.52%	4.00%	-	-	116	469	821
393	Tools, Shop And Garage Equip	2.52%	5.00%	-	-	185	992	1,930
394	Laboratory Equip	2.52%	10.00%	-	-	1,223	9,115	17,326
396	Communication Equip	2.52%	10.00%	-	-	5,033	37,199	69,625
398	Other Tangible Plant (Goodyear Capacity)	2.52%	4.00%	614,247	726,658	-	-	-
	Plant Held for Future Use (Land)	0.00%	0.00%	-	-	-	-	-
	Rounding			-	-	-	-	-
Plant Held for Future Use				1,381,028	1,680,739	1,088,255	2,067,483	3,167,010
TOTAL WATER PLANT				-	-	-	-	4,399,134

Litchfield Park Service Company - Wastewater Division
Plant Additions and Retirements

Exhibit
Rebuttal Schedule B-2
Page 3.13

Account	No.	Description	Deprec.	Rate	Year End Accumulated	2005	2007	2008
			Before	After	Depreciation by Account			
			Nov-02	Nov-02				
351	Organization		0.00%	0.00%	-	-	-	-
353	Land		0.00%	0.00%	-	-	-	-
354	Structures & Improvements		2.52%	3.33%	1,328,823	1,694,842	1,676,349	
355	Power Generation		2.52%	5.00%	62,117	86,644	107,121	
360	Collection Sewer Forced		2.52%	2.00%	(246,410)	(224,681)	(207,785)	
361	Collection Sewers Gravity		2.52%	2.00%	2,149,723	2,543,508	2,850,025	
362	Special Collecting Structures		2.52%	2.00%	-	-	-	
363	Customer Services		2.52%	2.00%	-	-	-	
364	Flow Measuring Devices		2.52%	10.00%	11,207	15,793	19,320	
366	Reuse Services		2.52%	2.00%	355,800	427,056	482,984	
367	Reuse Meters And Installation		2.52%	8.33%	4,443	5,557	7,610	
370	Receiving Wells		2.52%	3.33%	125,187	153,833	175,322	
371	Pumping Equipment		2.52%	12.50%	717,869	905,793	960,976	
374	Reuse Distribution Reservoirs		2.52%	2.50%	-	783	1,959	
375	Reuse Trans. and Dist. System		2.52%	2.50%	-	-	3,884	
380	Treatment & Disposal Equipment		2.52%	5.00%	932,891	1,177,304	1,365,496	
381	Plant Sewers		2.52%	5.00%	4,045	5,201	6,531	
382	Outfall Sewer Lines		2.52%	3.33%	50,225	61,669	70,253	
389	Other Sewer Plant & Equipment		2.52%	6.67%	40,695	64,524	47,460	
390	Office Furniture & Equipment		2.52%	6.67%	37,867	48,930	58,516	
390.1	Computers and Software		2.52%	20.00%	-	-	-	
391	Transportation Equipment		2.52%	20.00%	3,617	7,110	10,505	
392	Stores Equipment		2.52%	4.00%	1,529	1,887	2,156	
393	Tools, Shop And Garage Equip		2.52%	5.00%	4,827	6,523	8,241	
394	Laboratory Equip		2.52%	10.00%	34,422	47,564	60,590	
396	Communication Equip		2.52%	10.00%	134,707	167,248	195,163	
398	Other Tangible Plant (Goodyear Capacity)		2.52%	4.00%	-	-	-	
	Plant Held for Future Use (Land)		0.00%	0.00%	-	-	-	
	Rounding				-	-	-	

Plant Held for Future Use
TOTAL WATER PLANT

5,753,584 7,197,090 7,902,675

Litchfield Park Service Company - Wastewater Division
Plant Reconciliation to Prior Rate Case

Exhibit
Rebuttal Schedule B-2
Page 3.14

Line No.	Account No.	Description	Balance Per Company Per 2000 Filing Before Adj.	Land Trmmt Plant	CIAC Plant	CIAC Plant	CWIP PIS for 2000	CWIP PIS for 2000	Prior Case Adjusted Plant	Land Trmmt Plant	Reclass/ Rounding	Initial Balance
1												1,230,050
2												
3												
4												
5												
6	353	Land	-						-			-
7	354	Structures & Improvements	-						-			-
8	355	Power Generation	21,372						21,372			21,372
9	360	Collection Sewer Forced	555,955						555,955			555,955
10	361	Collection Sewers Gravity	3,654,748						6,954,989		(1,508,523)	5,446,466
11	362	Special Collecting Structures	-		782,105	1,288,086		563,237	666,813		1,508,523	1,508,523
12	363	Customer Services	-						-			-
13	364	Flow Measuring Devices	11,020						11,020			11,020
14	366	Reuse Services	370,964						370,964			370,964
15	367	Reuse Meters And Installation	-						-			-
16	370	Receiving Wells	-						-			-
17	371	Pumping Equipment	-						-			-
18	374	Reuse Distribution Reservoirs	-						-			-
19	375	Reuse Trans. and Dist. System	-						-			-
20	380	Treatment & Disposal Equipment	-						-			-
21	381	Plant Sewers	-						-			-
22	382	Outfall Sewer Lines	-						-			-
23	389	Other Sewer Plant & Equipment	5,508						5,508			5,508
24	390	Office Furniture & Equipment	29,620						29,620			29,620
25	390.1	Computers and Software	-						-			-
26	391	Transportation Equipment	225						225			225
27	392	Stores Equipment	-						-			-
28	393	Tools, Shop And Garage Equip	-						-			-
29	394	Laboratory Equip	-						-			-
30	396	Communication Equip	-						-			-
31	398	Other Tangible Plant (Goodyear Capacity)	4,460,750						4,460,750			4,460,750
32		Plant Held for Future Use (Land)	1,742,400	(1,742,400)					-		(2)	-
33		Rounding	-						-			-
34												
35												
36												
TOTAL			10,852,562	(1,742,400)	782,105	1,288,086	563,237	666,813	12,410,405	-		12,410,403

Litchfield Park Service Company - Wastewater Division

Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2

Exhibit
Rebuttal Schedule B-2
Page 4
Witness: Bourassa

Line No.	Accumulated Depreciation	A	B	C	D	E	F	Rebuttal Adjusted Accum. Depr.
		Plant Retirements	Transfer Of Odor Control Unit to BMSC	Lift Station Decommission Adjustment	A/D Capitalized Expenses		Difference to Computed Balance	
1	Acct. No. Description	Per Books Accum. Depr.						
2	351 Organization	-						
3	353 Land	-						
4	354 Structures & Improvements	2,073,139	(388,834)	(8,003)	47			1,676,349
5	355 Power Generation	107,028			94			107,121
6	360 Collection Sewer Forced	(207,785)			0			(207,785)
7	361 Collection Sewers Gravity	2,868,755	(18,730)					2,850,025
8	362 Special Collecting Structures	-						
9	363 Customer Services	-						
10	364 Flow Measuring Devices	19,320						19,320
11	366 Reuse Services	482,984						482,984
12	367 Reuse Meters and Installation	7,610						7,610
13	370 Receiving Wells	175,322						175,322
14	371 Pumping Equipment	1,064,668	(103,992)		300			960,976
15	374 Reuse Distribution Reservoirs	1,959						1,959
16	375 Reuse Trans. and Dist. System	3,884						3,884
17	380 Treatment & Disposal Equip.	1,376,536	(11,040)		(0)			1,365,496
18	381 Plant Sewers	6,531						6,531
19	382 Outfall Sewer Lines	70,253						70,253
20	389 Other Sewer Plant & Equip.	90,616			265			47,460
21	390 Office Furniture & Equipment	58,516	(43,421)					58,516
22	390.1 Computers and Software	-						
23	391 Transportation Equipment	10,505						10,505
24	392 Stores Equipment	2,156						2,156
25	393 Tools, Shop And Garage Equip	8,241						8,241
26	394 Laboratory Equip	60,590						60,590
27	396 Communication Equip	195,163						195,163
28	398 Other Tangible Plant	-						
29	TOTALS	\$ 8,475,991	\$ (554,977)	\$ (8,003)	\$ 705	\$ -	\$ -	\$ 7,902,675
30	Adjusted Accumulated Depreciation per Direct							\$ 8,475,991
31	Increase (decrease) in Plant-in-Service							\$ (573,316)
32	Adjustment to Plant-in-Service							\$ (573,316)
33	SUPPORTING SCHEDULES							
34	Rebuttal B-2, pages 3.4 to 3.15							
35	Rebuttal B-2, page 4.1 to 4.4							

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2 - A

Exhibit
Rebuttal Schedule B-2
Page 4.1
Witness: Bourassa

Line
No.

1	<u>A/D Plant Retirements</u>	
2		
3	354 - Structures and Improvements	\$ (388,834)
4	361 - Collection Sewer - Gravity	(18,730)
5	371 - Pumping Equipment	(103,992)
6	389 - Other Plant and Miscellaneous Equipment	<u>(43,421)</u>
7		
8	Increase (Decrease) in Plant-in-Service	<u>\$ (554,977)</u>
9		
10		
11		
12		
13		
14	<u>SUPPORTING SCHEDULES</u>	
15	Rebuttal B-2, page 3.1	
16		

Exhibit
Rebuttal Schedule B-2
Page 4.2
Witness: Bourassa

No.

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Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2 - C

Exhibit
Rebuttal Schedule B-2
Page 4.3
Witness: Bourassa

Line

No.

1	<u>Decommissioning Costs of Lift Station Requirement</u>	
2		
3	354 - Structures and Improvements - Yahweh Contracting LLC (Lift station removal/retirement)	\$ (8,003)
4		
5		
6		
7		
8	Increase (Decrease) in Plant-in-Service	<u>\$ (8,003)</u>
9		
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20	See testimony	
21		
22		

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2 - D

Exhibit
Rebuttal Schedule B-2
Page 4.4
Witness: Bourassa

Line
No.

1 A/D on Capitalized Plant

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<u>Acct.</u>	<u>Description</u>	<u>Depr.</u> <u>Rate</u>	<u>Original</u> <u>Cost</u>	<u>Yr</u> <u>Factor</u>	<u>Depreciation</u>
354	Structures & Improvements	3.33%	\$ 3,725	0.375	\$ 47
355	Power Generation	5.00%	5,004	0.375	94
371	Pumping Equipment	12.50%	6,394	0.375	300
389	Other Sewer Plant & Equip.	6.67%	10,579	0.375	265
					<hr/>
Increase (Decrease) in Plant-in-Service					<hr/> \$ 705 <hr/>

SUPPORTING SCHEDULE
Rebuttal B-2, page 3.3

See testimony

[illegible]

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments
Adjustment Number 4

Exhibit
Rebuttal Schedule B-2
Page 6
Witness: Bourassa

Line

No.

1 AIAC and CIAC Related to Plant Retirements

2

3 Advances-in-Aid of Construction

\$(16,649)

4

5 Contributions-in-Aid of Construction

\$(93,346)

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15 See Staff Adjustment 1 Schedule JMM-VW5

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Computation of Working Capital

Exhibit
Rebuttal Schedule B-5
Page 1
Witness: Bourassa

Line

No.

1	Cash Working Capital (1/8 of Allowance		
2	Operation and Maintenance Expense)	\$	711,419
3	Pumping Power (1/24 of Pumping Power)		11,148
4	Purchased Water (1/24 of Purchased Water)		50
5	Prepays		72,782
6	Materials & Supplies		-
7			
8			
9	Total Working Capital Allowance	<u>\$</u>	<u>795,399</u>
10			
11			
12	Working Capital Requested	<u>\$</u>	<u>-</u>
13			
14			
15	<u>SUPPORTING SCHEDULES:</u>	<u>RECAP SCHEDULES:</u>	
16	Rebuttal C-1	Rebuttal B-1	
17			

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Income Statement

Exhibit
Schedule C-1
Page 1
Witness: Bourassa

Line No.		Test Year Adjusted Results	Adjustment	Rebuttal Test Year Adjusted Results	Proposed Rate Increase	Rebuttal Adjusted with Rate Increase
1	Revenues					
2	Flat Rate Revenues	\$ 6,164,589	\$ -	\$ 6,164,589	\$ 4,776,618	\$ 10,941,207
3	Measured Revenues	92,030	-	92,030	-	92,030
4	Other Wastewater Revenues	99,755	-	99,755	-	99,755
5		<u>\$ 6,356,374</u>	<u>\$ -</u>	<u>\$ 6,356,374</u>	<u>\$ 4,776,618</u>	<u>\$ 11,132,993</u>
6	Operating Expenses					
7	Salaries and Wages	\$ -	-	\$ -	-	\$ -
8	Purchased Water and WW Treatment	1,205	-	1,205	-	1,205
9	Sludge Removal Expense	267,554	-	267,554	-	267,554
10	Purchased Power	632,064	-	632,064	-	632,064
11	Fuel for Power Production	2,076	-	2,076	-	2,076
12	Chemicals	279,749	-	279,749	-	279,749
13	Materials and Supplies	75,579	-	75,579	-	75,579
14	Contractual Services	3,117	-	3,117	-	3,117
15	Contractual Services- Testing	33,348	-	33,348	-	33,348
16	Contractual Services - Other	2,716,001	72,805	2,788,806	-	2,788,806
17	Contractual Services - Legal	24,084	-	24,084	-	24,084
18	Equipment Rental	78,309	-	78,309	-	78,309
19	Rents - Building	18,976	-	18,976	-	18,976
20	Transportation Expenses	69,551	-	69,551	-	69,551
21	Insurance - General Liability	32,133	-	32,133	-	32,133
22	Insurance - Vehicle	2,213	-	2,213	-	2,213
23	Regulatory Commission Expense	19,133	(1,136)	17,997	-	17,997
24	Reg.Comm. Exp. - Rate Case	70,000	-	70,000	-	70,000
25	Miscellaneous Expense	36,656	(494)	36,162	-	36,162
26	Bad Debt Expense	43,889	(21,791)	22,098	-	22,098
27	Depreciation and Amortization	1,550,237	(27,149)	1,523,088	-	1,523,088
28	Taxes Other Than Income	-	-	-	-	-
29	Property Taxes	336,629	(2,865)	333,764	-	333,764
30	Income Tax	(99,906)	(6,532)	(106,438)	1,843,721	1,737,283
31						
32	Total Operating Expenses	<u>\$ 6,192,596</u>	<u>\$ 12,838</u>	<u>\$ 6,205,434</u>	<u>\$ 1,843,721</u>	<u>\$ 8,049,155</u>
33	Operating Income	<u>\$ 163,778</u>	<u>\$ (12,838)</u>	<u>\$ 150,940</u>	<u>\$ 2,932,897</u>	<u>\$ 3,083,837</u>
34	Other Income (Expense)					
35	Interest Income	-	-	-	-	-
36	Other income	-	-	-	-	-
37	Interest Expense	(322,703)	2,446	(320,256)	-	(320,256)
38	Other Expense	-	-	-	-	-
39						
40	Total Other Income (Expense)	<u>\$ (322,703)</u>	<u>\$ 2,446</u>	<u>\$ (320,256)</u>	<u>\$ -</u>	<u>\$ (320,256)</u>
41	Net Profit (Loss)	<u>\$ (158,925)</u>	<u>\$ (10,391)</u>	<u>\$ (169,316)</u>	<u>\$ 2,932,897</u>	<u>\$ 2,763,581</u>

SUPPORTING SCHEDULES:
Rebuttal C-1, page 2

RECAP SCHEDULES:
Rebuttal A-1

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Income Statement

Exhibit
Rebuttal Schedule C-1
Page 2.1
Witness: Bourassa

Continued on
Page 2.2

Line No.		1 Test Year Adjusted Results	2 Depreciation Expense	3 Property Tax	4 Contractual Services Aerotek	5 Meals & Entertainment	6 Bad Debt Expense	7 Capitalized and Decomm. Expenses	8 Remove Rate Case Expense
1	Revenues								
2	Flat Rate Revenues	\$ 6,164,589							
3	Measured Revenues	92,030							
4	Other Wastewater Revenues	99,755							
5		\$ 6,356,374	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	Operating Expenses								
7	Salaries and Wages	\$ -							
8	Purchased WW Treatment	1,205							
9	Sludge Removal Expense	267,554							
10	Purchased Power	632,064							
11	Fuel for Power Production	2,076							
12	Chemicals	279,749							
13	Materials and Supplies	75,579							
14	Contractual Services	3,117							
15	Contractual Services- Testing	33,348							
16	Contractual Services - Other	2,716,001			(42,200)			(33,705)	
17	Contractual Services - Legal	24,084							
18	Equipment Rental	78,309							
19	Rents - Building	18,976							
20	Transportation Expenses	69,551							
21	Insurance - General Liability	32,133							
22	Insurance - Vehicle	2,213							
23	Regulatory Commission Expense	19,133							
24	Reg. Comm. Exp. - Rate Case	70,000							
25	Miscellaneous Expense	36,656				(494)			
26	Bad Debt Expense	43,889					(21,791)		
27	Depreciation and Amortization	1,550,237	(27,149)						
28	Taxes Other Than Income	-							
29	Property Taxes	336,629		(2,865)					
30	Income Tax	(99,906)							
31		-							
32	Total Operating Expenses	\$ 6,192,596	\$ (27,149)	\$ (2,865)	\$ (42,200)	\$ (494)	\$ (21,791)	\$ (33,705)	\$ (1,136)
33	Operating Income	\$ 163,778	\$ 27,149	\$ 2,865	\$ 42,200	\$ 494	\$ 21,791	\$ 33,705	\$ 1,136
34	Other Income (Expense)								
35	Interest Income	-							
36	Other Income	-							
37	Interest Expense	(322,703)							
38	Other Expense	-							
39									
40	Total Other Income (Expense)	\$ (322,703)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
41	Net Profit (Loss)	\$ (158,925)	\$ 27,149	\$ 2,865	\$ 42,200	\$ 494	\$ 21,791	\$ 33,705	\$ 1,136
42									
43	SUPPORTING SCHEDULES:								
44	Rebuttal C-2								

Exhibit
Rebuttal Schedule C-1
Page 2.2
Witness: Bourassa

Line No.		Unnecessary Expense	Cost Allocation	Interest Synchronization	Income Tax	Left Blank	Adjusted Results	Rate Increase	with Rate Increase
1	Revenues								
2	Fiat Rate Revenues						\$ 6,164,589	\$ 4,776,618	\$ 10,941,207
3	Measured Revenues						92,030		92,030
4	Other Wastewater Revenues						99,755		99,755
5							\$ 6,356,374	\$ 4,776,618	\$ 11,132,993
6	Operating Expenses								
7	Salaries and Wages						\$ -	\$ -	\$ -
8	Purchased WW Treatment						1,205		1,205
9	Sludge Removal Expense						267,554		267,554
10	Purchased Power						632,064		632,064
11	Fuel for Power Production						2,076		2,076
12	Chemicals						279,749		279,749
13	Materials and Supplies						75,579		75,579
14	Contractual Services						3,117		3,117
15	Contractual Services- Testing						33,348		33,348
16	Contractual Services - Other		151,838				2,788,806		2,788,806
17	Contractual Services - Legal	(3,128)					24,084		24,084
18	Equipment Rental						78,309		78,309
19	Rents - Building						18,976		18,976
20	Transportation Expenses						69,551		69,551
21	Insurance - General Liability						32,133		32,133
22	Insurance - Vehicle						2,213		2,213
23	Regulatory Commission Expense						17,997		17,997
24	Reg.Comm. Exp. - Rate Case						70,000		70,000
25	Miscellaneous Expense						36,162		36,162
26	Bad Debt Expense						22,098		22,098
27	Depreciation and Amortization						1,523,088		1,523,088
28	Taxes Other Than Income						-		-
29	Property Taxes						333,764		333,764
30	Income Tax				(6,532)		(106,438)	1,843,721	1,737,283
31							-		-
32	Total Operating Expenses	\$ (3,128)	\$ 151,838	\$ -	\$ (6,532)	\$ -	\$ 6,205,434	\$ 1,843,721	\$ 8,049,155
33	Operating Income	\$ 3,128	\$ (151,838)	\$ -	\$ 6,532	\$ -	\$ 150,940	\$ 2,932,897	\$ 3,083,837
34	Other Income (Expense)								
35	Interest Income						-		-
36	Other Income						-		-
37	Interest Expense			2,446			(320,256)		(320,256)
38	Other Expense						-		-
39									
40	Total Other Income (Expense)	\$ -	\$ -	\$ 2,446	\$ -	\$ -	\$ (320,256)	\$ -	\$ (320,256)
41	Net Profit (Loss)	\$ 3,128	\$ (151,838)	\$ 2,446	\$ 6,532	\$ -	\$ (169,316)	\$ 2,932,897	\$ 2,763,581

RECAP SCHEDULES:
Rebuttal C-1, page 1

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Adjustments to Revenues and Expenses

Exhibit
Schedule C-2
Page 1
Witness: Bourassa

Line No.	1	2	3	4	5	6	Subtotal
	Depreciation Expense	Property Taxes	Contractual Serv. Aerotek	Meals & Entertainment	Bad Debt Expense	Capitalized Expenses	
1	(27,149)	(2,865)	(42,200)	(494)	(21,791)	(33,705)	(128,204)
2							
3							
4							
5							
6							
7	27,149	2,865	42,200	494	21,791	33,705	128,204
8							
9							
10							
11							
12							
13							
14							
15							
16	27,149	2,865	42,200	494	21,791	33,705	128,204
17							
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54							

Line No.	7	8	9	10	11	12	Subtotal
	Remove Rate Case Exp.	Unnecessary Exp.	Central Office Costs	Interest Synchronization	Income Tax	Blank	
1	(1,136)	(3,128)	151,838	(6,532)			12,838
2							
3							
4							
5							
6							
7	1,136	3,128	(151,838)	-	6,532	-	(12,838)
8							
9							
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Line No.	13	14	15	16	17	18	Total
	Blank	Blank	Blank	Blank	Blank	Blank	
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54							

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Adjustments to Revenues and Expenses
Adjustment Number 1

Exhibit
Schedule C-2
Page 2
Witness: Bourassa

Line

<u>No.</u>			<u>Adjusted</u>	<u>Proposed</u>	<u>Depreciation</u>
	<u>Acct.</u>	<u>Description</u>	<u>Original</u>	<u>Rates</u>	<u>Expense</u>
	<u>No.</u>		<u>Cost</u>		
1		<u>Depreciation Expense</u>			
2					
3					
4					
5	351	Organization	-	0.00%	-
6	353	Land	1,783,426	0.00%	-
7	354	Structures & Improvements	18,941,384	3.33%	630,748
8	355	Power Generation	548,674	5.00%	27,434
9	360	Collection Sewer Forced	1,161,105	2.00%	23,222
10	361	Collection Sewers Gravity	23,094,661	2.00%	461,893
11	362	Special Collecting Structures	-	2.00%	-
12	363	Customer Services	-	2.00%	-
13	364	Flow Measuring Devices	47,019	10.00%	4,702
14	366	Reuse Services	3,789,468	2.00%	75,789
15	367	Reuse Meters and Installation	52,331	8.33%	4,359
16	370	Receiving Wells	860,393	3.33%	28,651
17	371	Pumping Equipment	1,760,813	12.50%	220,102
18	374	Reuse Distribution Reservoirs	62,825	2.50%	1,571
19	375	Reuse Trans. and Dist. System	414,315	2.50%	10,358
20	380	Treatment & Disposal Equip.	5,431,228	5.00%	271,561
21	381	Plant Sewers	47,788	5.00%	2,389
22	382	Outfall Sewer Lines	343,681	3.33%	11,445
23	389	Other Sewer Plant & Equip.	611,767	6.67%	40,805
24	390	Office Furniture & Equipment	198,772	6.67%	13,258
25	390.1	Computers and Software	-	20.00%	-
26	391	Transportation Equipment	26,078	20.00%	5,216
27	392	Stores Equipment	8,968	4.00%	359
28	393	Tools, Shop And Garage Equip	56,167	5.00%	2,808
29	394	Laboratory Equip	173,948	10.00%	17,395
30	396	Communication Equip	418,996	10.00%	41,900
31	398	Other Tangible Plant	-	10.00%	-
32		TOTALS	\$ 59,833,807		\$ 1,895,964
33					
34		Less: Amortization of Contributions			
35	361	Collection Sewers Gravity	\$ 18,643,786	2.00%	\$ (372,876)
36					
37		Total Depreciation Expense			\$ 1,523,088
38					
39		Test Year Depreciation Expense			1,550,237
40					
41		Increase (decrease) in Depreciation Expense			(27,149)
42					
43		Adjustment to Revenues and/or Expenses			\$ (27,149)
44					
45		<u>SUPPORTING SCHEDULE</u>			
46		B-2, page 3			

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Adjustment to Revenues and/or Expenses
Adjustment Number 2

Exhibit
Rebuttal Schedule C-2
Page 3
Witness: Bourassa

Line

No.

1	<u>Adjust Property Taxes to Reflect Proposed Revenues:</u>	
2		
3	Adjusted Revenues in year ended 09/30/2008	\$ 6,356,374
4	Adjusted Revenues in year ended 09/30/2008	6,356,374
5	Proposed Revenues	<u>11,132,993</u>
6	Average of three year's of revenue	\$ 7,948,580
7	Average of three year's of revenue, times 2	\$ 15,897,161
8	Add:	
9	Construction Work in Progress at 10%	\$ 39,301
10	Deduct:	
11	Book Value of Transportation Equipment	<u>15,573</u>
12		
13	Full Cash Value	\$ 15,881,588
14	Assessment Ratio	<u>21%</u>
15	Assessed Value	3,335,133
16	Property Tax Rate	9.5187%
17		
18	Property Tax	317,463
19	Plus: Tax on Parcels	16,302
20		
21	Total Property Tax at Proposed Rates	<u>\$ 333,764</u>
22	Property Taxes recorded during the test year	<u>336,629</u>
23	Change in property taxes	<u>\$ (2,865)</u>
24		
25		
26	Adjustment to Revenues and/or Expenses	<u>\$ (2,865)</u>
27		
28		

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Adjustment to Revenues and/or Expenses
Adjustment Number 3

Exhibit
Rebuttal Schedule C-2
Page 4
Witness: Bourassa

Line

No.

1	<u>Contractual Services - Aerotek</u>	
2		
3	Remove Contractual Services related to Black Mountain Sewer Company	\$ (42,200)
4		
5		
6		
7	Increase(decrease) in Contractual Services	<u>\$ (42,200)</u>
8		
9		
10		
11	Adjustment to Revenue and/or Expense	<u>\$ (42,200)</u>
12		
13		
14		
15		
16		
17	See Testimony	
18		
19		
20		

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Adjustment to Revenues and/or Expenses
Adjustment Number 4

Exhibit
Rebuttal Schedule C-2
Page 5
Witness: Bourassa

Line

No.

1 Miscellaneous Expense

2

3

4 Beverages expenses included in Miscellaneous expense

\$ (494)

5

6

7

8 Increase(decrease) in Miscellaneous Expense

\$ (494)

9

10

11 Adjustment to Revenue and/or Expense

\$ (494)

12

13 SUPPORTING SCHEDULES

14 Staff Schedule JMM-VW16 Adjustment #4

15

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Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Adjustment to Revenues and/or Expenses
Adjustment Number 5

Exhibit
Rebuttal Schedule C-2
Page 6
Witness: Bourassa

Line

No.

1 Bad Debt Expense

2

3

4 Normalized Bad Debt Expense

\$ 22,098

5

6 Bad Debt Expense per Direct

43,889

7

8

9 Increase(decrease) in Bad Debt Expense

\$ (21,791)

10

11

12 Adjustment to Revenue and/or Expense

\$ (21,791)

13

14

15 SUPPORTING SCHEDULES

16 Staff Schedule JMM-W17 Adjustment #5

17

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20

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Adjustment to Revenues and/or Expenses
Adjustment Number 6

Exhibit
Rebuttal Schedule C-2
Page 7
Witness: Bourassa

Line

No.

1	<u>Capitalized Expenses and Decommissioning Costs</u>	
2		
3		
4		
5	354 - Structures and Improvements - Dean Fence and Gate (fence)	\$ (3,725)
6	355 - Power Generation Equipment - Loftin Equipment Co. (generator duct)	(5,004)
7	371 - Pumping Equipment - Precision Electric (install rebuilt pump)	(1,530)
8	371 - Pumping Equipment - Precision Electric (new reinforced strainer baskets)	(4,864)
9	389 - Other Plant and Misc. Equip. - Keogh Engineering (odor monitor site plant and pole mnt)	(1,450)
10	389 - Other Plant and Misc. Equip. - Keogh Engineering (odor monitor legal descr. & map)	(550)
11	389 - Other Plant and Misc. Equip. - Keogh Engineering (filter system repair)	(8,054)
12	389 - Other Plant and Misc. Equip. - Keogh Engineering (work on UV system)	(525)
13	354 - Structures and Improvements - Yahweh Contracting LLC (Lift station removal/retirement)	(8,003)
14	Total Capitalized Expenses	<u>\$ (33,705)</u>
15		
16	Increase(decrease) in Contractual Services - Other	<u>\$ (33,705)</u>
17		
18		
19	Adjustment to Revenue and/or Expense	<u>\$ (33,705)</u>
20		
21		
22	<u>SUPPORTING SCHEDULE</u>	
23	Rebuttal B-2, page 3.3	
24	Rebuttal B-2, page 4.3	
25		

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Adjustment to Revenues and/or Expenses
Adjustment Number 7

Exhibit
Rebuttal Schedule C-2
Page 8
Witness: Bourassa

Line
No.

1	<u>Remove Expenses Included in Rate Case Expense</u>	
2		
3	Bourassa, CPA Inv. # 1000002402	\$ (155)
4	Bourassa, CPA Inv. # 1000002413	(981)
5		<u>(1,136)</u>
6		
7		
8	Increase(decrease) in Regulatory Commission Expense	<u>\$ (1,136)</u>
9		
10		
11	Adjustment to Revenue and/or Expense	<u>\$ (1,136)</u>
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Adjustment to Revenues and/or Expenses
Adjustment Number 8

Exhibit
Rebuttal Schedule C-2
Page 9
Witness: Bourassa

Line

No.

1			
2	<u>Remove Unncessary Expense</u>		
3			
4	Meals and Entertainment	Exp cost for the DBack game	\$ (6,400)
5	Meals and Entertainment	BALANCE DUE FOR 2008 XMAS PART	(953)
6	Meals and Entertainment	DJ SERVICE - XMAS PARTY	(495)
7	Meals and Entertainment	For Holiday Party Dec. 2008	(4,959)
8	Meals and Entertainment	Catered Lunch	(412)
9	Total		<u>\$ (13,219)</u>
10			
11	Wastewater Divison 4-factor allocation %		23.66%
12			
13	Increase (decrease) in Contractual Services - Other		<u>\$ (3,128)</u>
14			
15			
16	Adjustment to Revenue and/or Expense		<u>\$ (3,128)</u>
17			
18			
19			
20			

Litchfield Park Service Company - Wastewater Division

Test Year Ended September 30, 2008

Adjustment to Revenues and Expenses

Adjustment Number 9

Exhibit
Rebuttal Schedule C-2

Page 10

Witness: Bourassa

Line
No.

Central Office Costs - Infrastructure Allocation

	Actual Total	Cost Pool ¹	Adjustments	Rejoinder Total	Utility Infrastructure Group Allocation %	Utility Infrastructure Group Allocated	LPSCo Allocation by Custome Count	Rejoinder LPSCo Allocation
9	\$ 984,476			\$ 984,476	26.98%	\$ 265,652	25.83%	68,618
10	383,940			\$ 383,940	26.98%	103,603	25.83%	26,761
11	722,428			\$ 722,428	26.98%	194,941	25.83%	50,353
12	448,761			\$ 448,761	26.98%	121,094	25.83%	31,279
13	636,255			\$ 636,255	26.98%	171,688	25.83%	44,347
14	277,582			\$ 277,582	26.98%	74,903	25.83%	19,347
15	225,052			\$ 225,052	26.98%	60,728	25.83%	15,686
16	63,843			\$ 63,843	26.98%	17,227	25.83%	4,450
17	295,887			\$ 295,887	26.98%	79,843	25.83%	20,623
18	128,206		(145,642) ¹	\$ (17,436)	26.98%	-4,705	25.83%	(1,215)
19	761,628		(46,186) ¹	\$ 715,442	26.98%	193,056	25.83%	49,866
20	194,727			\$ 194,727	26.98%	52,545	25.83%	13,572
21								
22	Total (Canadian dollars (\$ 5,122,785	\$ (191,828)	\$ 4,930,957		\$ 1,330,576		\$ 343,688
23	Factor	1.00	1.00	1.00		1.00		1.00
24	Total (US dollars USD)	\$ 5,122,785	\$ (191,828)	\$ 4,930,957		\$ 1,330,576		\$ 343,688
25								
26	Infrastructure Cost Allocation per Direct (USD) ²							
27								
28	Increase (decrease) in Infrastructure Allocated Costs (USD)							
29								
30								
31	Adjustment to Revenues and/or Expenses							
32								
33								
34								
35								

¹ Per Response to JMM 5.5

² Per Response to JMM 1.67

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Adjustment to Revenues and Expenses
Adjustment Number 10

Exhibit
Rebuttal Schedule C-2
Page 11
Witness: Bourassa

Line
No.

1	<u>Interest Synchronization</u>				
2					
3					
4	Fair Value Rate Base		\$	28,034,885	
5	Weighted Cost of Debt			1.14%	
6	Interest Expense		\$	320,256	
7					
8	Test Year Interest Expense		\$	322,703	
9					
10	Increase (decrease) in Interest Expense			(2,446)	
11					
12					
13					
14	Adjustment to Revenue and/or Expense		\$	2,446	
15					
16					
17	<u>Weighted Cost of Debt Computation</u>				
18					
19		<u>Amount</u>	<u>Percent</u>	<u>Cost</u>	<u>Weighted Cost</u>
20	Debt	\$ 11,506,844	17.86%	6.39%	1.14%
21	Equity	\$ 52,906,962	82.14%	12.00%	9.86%
22	Total	\$ 64,413,805	100.00%		11.00%
23					
24					

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Adjustment to Revenues and/or Expenses
Adjustment Number 11

Exhibit
Rebuttal Schedule C-2
Page 12
Witness: Bourassa

Line
No.

1	<u>Income Tax Computation</u>		
2			
3			
4			
5			
6			
7	Taxable Income before adjustments	\$ (275,754)	\$ 4,500,864
8	Adjustments to Taxable Income	-	-
9	Taxable Income	<u>\$ (275,754)</u>	<u>\$ 4,500,864</u>
10			
11			
12			
13	Income Before Taxes	<u>\$ (275,754)</u>	<u>\$ 4,500,864</u>
14			
15	Arizona Income Before Taxes		\$ 4,500,864
16			
17	Less Arizona Income Tax		<u>\$ 313,620</u>
18	Rate = 6.97%		
19	Arizona Taxable Income		\$ 4,187,244
20			
21	Arizona Income Taxes		\$ 313,620
22			
23	Federal Income Before Taxes		\$ 4,500,864
24			
25	Less Arizona Income Taxes		<u>\$ 313,620</u>
26			
27	Federal Taxable Income		<u>\$ 4,187,244</u>
28			
29			
30			
31	FEDERAL INCOME TAXES:		
32	15% BRACKET		\$ 7,500
33	25% BRACKET		\$ 6,250
34	34% BRACKET		\$ 8,500
35	39% BRACKET		\$ 91,650
36	34% BRACKET		\$ 1,309,763
37			Rate
38	Federal Income Taxes		<u>\$ 1,423,663</u> 31.63%
39			
40			
41	Total Income Tax		<u>\$ 1,737,283</u>
42			
43	Overall Tax Rate		<u>38.60%</u>
44			
45	Income Tax at Proposed Rates Effective Rate	→ \$ (106,438)	
46			

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Computation of Gross Revenue Conversion Factor

Exhibit
Rebuttal Schedule C-3
Page 1
Witness: Bourassa

Line No.	Description	Percentage of Incremental Gross Revenues
1	Federal Income Taxes	31.63%
2		
3	State Income Taxes	6.97%
4		
5	Other Taxes and Expenses	0.00%
6		
7		
8	Total Tax Percentage	38.60%
9		
10	Operating Income % = 100% - Tax Percentage	61.40%
11		
12		
13		
14		
15	$\frac{1}{\text{Operating Income \%}} = \text{Gross Revenue Conversion Factor}$	
16		1.6286
17		
18	<u>SUPPORTING SCHEDULES:</u>	<u>RECAP SCHEDULES:</u>
19		Rebuttal A-1
20		

Litchfield Park Service Company - Wastewater Division
Revenue Summary
 With Annualized Revenues to Year End Number of Customers
 Test Year Ended September 30, 2008

Exhibit
 Rebuttal Schedule H-1
 Page 1
 Witness: Bourassa

Line No.	Customer Classification	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Sewer Revenues	Percent of Proposed Sewer Revenues
1	Residential	\$ 4,647,120	\$ 8,236,679	\$ 3,589,559	77.24%	73.99%	74.47%
2	Residential HOA 135	44,064	78,100	34,036	77.24%	0.70%	0.71%
3	Residential HOA 160	52,224	92,563	40,339	77.24%	0.83%	0.84%
4	Residential HOA 520	169,728	300,830	131,102	77.24%	2.70%	2.72%
5	Subtotal	\$ 4,913,136	\$ 8,708,172	\$ 3,795,036	77.24%	78.23%	78.73%
6							
7	Multi-Unit Housing						
8	Multi-Unit 3	9,923	17,591	7,667	77.27%	0.16%	0.16%
9	Multi-Unit 5	3,156	5,595	2,439	77.27%	0.05%	0.05%
10	Multi-Unit 6	1,818	3,223	1,405	77.27%	0.03%	0.03%
11	Multi-Unit 7	8,484	15,039	6,555	77.27%	0.14%	0.14%
12	Multi-Unit 8	73,124	129,625	56,501	77.27%	1.16%	1.17%
13	Multi-Unit 9	2,727	4,834	2,107	77.27%	0.04%	0.04%
14	Multi-Unit 14	46,662	82,716	36,054	77.27%	0.74%	0.75%
15	Multi-Unit 16	116,352	206,254	89,902	77.27%	1.85%	1.86%
16	Multi-Unit 17	5,151	9,131	3,980	77.27%	0.08%	0.08%
17	Multi-Unit 18	5,454	9,668	4,214	77.27%	0.09%	0.09%
18	Multi-Unit 24	7,272	12,891	5,619	77.27%	0.12%	0.12%
19	Multi-Unit 46	13,938	24,708	10,770	77.27%	0.22%	0.22%
20	Multi-Unit 84	25,452	45,118	19,666	77.27%	0.41%	0.41%
21	Multi-Unit 90	27,270	48,341	21,071	77.27%	0.43%	0.44%
22	Multi-Unit 132	79,992	141,800	61,808	77.27%	1.27%	1.28%
23	Multi-Unit 304	92,112	163,284	71,172	77.27%	1.47%	1.48%
24							
25	Subtotal	\$ 518,888	\$ 919,818	\$ 400,931	77.27%	8.26%	8.32%
26							
27	Small Commercial	\$ 84,318	\$ 149,463	65,145	77.26%	1.34%	1.35%
28	Measured Service:						
29	Regular Domestic	\$ 256,547	\$ 454,904	198,357	77.32%	4.08%	4.11%
30	Restaurant, Motels, Grocery, Dry Cleaning	222,936	395,322	172,386	77.33%	3.55%	3.57%
31	Subtotal	\$ 479,482	\$ 850,226	\$ 370,744	77.32%	7.63%	7.69%
32							
33	Wigwam Resort - Per Room	\$ 103,929	\$ 184,232	\$ 80,303	77.27%	1.65%	1.67%
34	Wigwam Resort - Main	12,000	21,270	9,270	77.25%	0.19%	0.19%
35	Subtotal	\$ 115,929	\$ 205,502	\$ 89,573	77.27%	1.85%	1.86%
36							
37	Elementary Schools	\$ 32,640	\$ 57,854	\$ 25,214	77.25%	0.52%	0.52%
38	Middle and High Schools	28,800	51,048	22,248	77.25%	0.46%	0.46%
39	Community College	14,880	26,375	11,495	77.25%	0.24%	0.24%
40	Subtotal	\$ 76,320	\$ 135,277	\$ 58,957	77.25%	1.22%	1.22%
41							
42	Effluent Sales	92,268	92,268	-	0.00%	1.47%	0.83%
43	Total Revenues Before Revenues Annualization	\$ 6,280,340	\$ 11,060,726	\$ 4,780,386	76.12%	197.19%	197.81%

Litchfield Park Service Company - Wastewater Division
Revenue Summary
 With Annualized Revenues to Year End Number of Customers
 Test Year Ended September 30, 2008

Exhibit
 Rebuttal Schedule H-1
 Page 2
 Witness: Bourassa

Line No.	Customer Classification	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Sewer Revenues	Percent of Proposed Sewer Revenues
1							
2	<u>Revenue Annualization</u>						
3	Residential	(36,394)	(64,505)	(28,111)	77.24%	-0.58%	-0.58%
4	Multi-Unit Housing - Multit-Unit 8	2,020	3,581	1,561	77.27%	0.03%	0.03%
5	Small Commercial	138	245	107	77.26%	0.00%	0.00%
6	Measured Service:						
7	Regular Domestic	21,275	37,725	16,449	77.32%	0.34%	0.34%
8	Restaurant, Motels, Grocery, Dry Cleaning	11,357	20,139	8,782	77.33%	0.18%	0.18%
9	Effluent Sales	(25,908)	(25,908)	-	0.00%	-0.41%	-0.23%
10	Subtotal Revenue Annualization	(27,512)	(28,724)	(1,213)	4.41%	-0.44%	-0.26%
11							
12	<u>Misc Service Revenues</u>						
13	Misc Revenues	99,755	99,755	-	0.00%	1.59%	0.90%
14	Reconciling Amount to C-1	3,791	1,236	(2,555)	-67.40%	0.06%	0.01%
15	Totals	6,356,375	11,132,992	4,776,618	75.15%	197.25%	197.83%
16							
17	Revenue Reconciliation						
18	Recorded Revenues		\$ 99,755				
19	Amount per Bill Count Before Rev. Annualization		6,380,095				
20	Difference		\$ (6,280,340)				
21	Tolerance (+/- 1/2 percent)		\$ 499				
22	Acceptable		No				
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							

Litchfield Park Service Company - Wastewater Division
Test Year Ended September 30, 2008
Analysis of Revenue by Detailed Class
Special Rate Commercial Customers Pay Standard Commercial Rate

Rebuttal Schedule H-2
Page 1
Witness: Bourassa

Line No.	Customer Classification	Average Number of Customers at 9/30/2008	Average Water Use	Average Bill		Proposed Increase	
				Present Rates	Proposed Rates	Dollar Amount	Percent Amount
1	Residential	14,126	N/A	\$ 27.20	\$ 48.21	\$ 21.01	77.243%
2	Residential HOA 135	1	N/A	3,672.00	6,508.35	2,836.35	77.243%
3	Residential HOA 160	1	N/A	4,352.00	7,713.60	3,361.60	77.243%
4	Residential HOA 520	1	N/A	14,144.00	25,069.20	10,925.20	77.243%
5							
6	Multi-Unit Housing						
7	Multi-Unit 3	11	N/A	75.75	134.28	58.53	77.267%
8	Multi-Unit 5	2	N/A	126.25	223.80	97.55	77.267%
9	Multi-Unit 6	1	N/A	151.50	268.56	117.06	77.267%
10	Multi-Unit 7	4	N/A	176.75	313.32	136.57	77.267%
11	Multi-Unit 8	30	N/A	202.00	358.08	156.08	77.267%
12	Multi-Unit 9	1	N/A	227.25	402.84	175.59	77.267%
13	Multi-Unit 14	11	N/A	353.50	626.64	273.14	77.267%
14	Multi-Unit 16	24	N/A	404.00	716.16	312.16	77.267%
15	Multi-Unit 17	1	N/A	429.25	760.92	331.67	77.267%
16	Multi-Unit 18	1	N/A	454.50	805.68	351.18	77.267%
17	Multi-Unit 24	1	N/A	606.00	1,074.24	468.24	77.267%
18	Multi-Unit 46	1	N/A	1,161.50	2,058.96	897.46	77.267%
19	Multi-Unit 84	1	N/A	2,121.00	3,759.84	1,638.84	77.267%
20	Multi-Unit 90	1	N/A	2,272.50	4,028.40	1,755.90	77.267%
21	Multi-Unit 132	2	N/A	3,333.00	5,908.32	2,575.32	77.267%
22	Multi-Unit 304	1	N/A	7,676.00	13,607.04	5,931.04	77.267%
23							
24	Small Commercial	153	N/A	46.00	81.54	35.54	77.261%
25	Measured Service:						
26	Regular Domestic	138	57,450	155.01	274.87	119.85	77.318%
27	Restaurant, Motels, Grocery, Dry Cleaning	62	91,567	300.45	532.78	232.33	77.326%
28							
29	Wigwam Resort - Per Room	1	N/A	8,660.75	15,352.68	6,691.93	77.267%
30	Wigwam Resort - Main	1	N/A	1,000.00	1,772.50	772.50	77.250%
31							
32	Elementary Schools	4	N/A	680	1,205	525.30	77.250%
33	Middle and High Schools	3	N/A	800	1,418	618.00	77.250%
34	Community College	1	N/A	1,240	2,198	957.90	77.250%
35							
36	Effluent Sales (\$55 per acre foot)	4	5,939,470	1,003	1,003	-	0.000%
37	Effluent Sales (\$100 per acre foot)	0	2,856,100	877	877	-	0.000%
38	Effluent Sales (\$225 per acre foot)	1	3,383,491	2,336	2,336	-	0.000%
39	Total	<u>14,589</u>					
40							
41							

Litchfield Park Service Company - Wastewater Division
Present and Proposed Rates
Test Year Ended September 30, 2008

Exhibit
Rebuttal Schedule H-3
Page 1
Witness: Bourassa

Line No.		Present Rates	Proposed Rates	Percent Change
1				
2	<u>Customer Classification</u>			
3				
4	Monthly Charge for:			
5	Monthly Residential Service	\$ 27.20	\$ 48.21	77.24%
6				
7	Multi-Unit Housing - Monthly per Unit	\$ 25.25	\$ 44.76	77.27%
8				
9	Commercial:			
10	Small Commercial - Monthly Service	\$ 46.00	\$ 81.54	77.26%
11	Measured Service:			
12	Regular Domestic:			
13	Monthly Service Charge	\$ 25.75	\$ 45.64	77.24%
14	Rate Per 1,000 Gallons of Water	\$ 2.25	\$ 3.99	77.33%
15				
16	Restaurant, Motels, Grocery Stores & Dry Cleaning Estab. ¹			
17	Monthly Service Charge	\$ 25.75	\$ 45.64	77.24%
18	Rate Per 1,000 Gallons of Water	\$ 3.00	\$ 5.32	77.33%
19				
20	Wigwam Resort:			
21	Monthly Rate - Per Unit	\$ 25.25	\$ 44.76	77.27%
22	Main Building - Per Month	\$ 1,000.00	\$ 1,772.50	77.25%
23				
24	Schools - Monthly Service Rates:			
25	Elementary Schools	\$ 680.00	\$ 1,205.30	77.25%
26	Middle Schools	\$ 800.00	\$ 1,418.00	77.25%
27	High Schools	\$ 800.00	\$ 1,418.00	77.25%
28	Community College	\$ 1,240.00	\$ 2,197.90	77.25%
29				
30	Effluent ²	Market	Market	0.00%
31				
32	¹ Motels without restuarants charged multi-unit monthly rate.			
33	² Market Rate - Maximum effluent rate shall not exceed \$430 per acre foot based on a potable water rate of \$1.32 per thousand			
34	gallons.			
35				

Litchfield Park Service Company - Wastewater Division
Changes in Representative Rate Schedules
Test Year Ended September 30, 2008

Exhibit
Rebuttal Schedule H-3
Page 2
Witness: Bourassa

Line		Present	Proposed
No.	<u>Other Service Charges</u>	<u>Rates</u>	<u>Rates</u>
1	Establishment (Regular Hours) per Rule R14-2-603D (a)	\$ 20.00	\$ 20.00
2	Establishment (After Hours) per Rule R14-2-603D (a)	\$ 40.00	\$ 40.00
3	Re-Establishment of Service per Rule R14-2-603D (a)	(b)	(b)
4	Reconnection (Regular Hours) per Rule R14-2-603D (a)	\$ 50.00	\$ 50.00
5	Reconnection (After Hours) per Rule R14-2-603D (a)	\$ 65.00	\$ 65.00
6	NSF Check, per Rule R14-2-608E (a)	\$ 20.00	\$ 20.00
7	Deferred Payment, Per Month	1.50%	1.50%
8	Late Charge	(c)	(c)
9	Service Calls - Per Hour/After Hours(d)	\$ 40.00	\$ 40.00
10	Deposit Requirement	(e)	(e)
11	Deposit Interest	3.50%	3.50%
12	Service Lateral Connection Charge- All Sizes	(f)	(f)
13	Main Extension Tariff, per Rule R14-2-606B	(g)	(g)
14			
15			
16			
17	(a) Service charges for customers taking both water and sewer service are not duplicative.		
18	(b) Minimum charge times number of full months off the system. per Rule R14-2-603D.		
19	(c) Per Rule R14-2-608F. Greater of \$5.00 or 1.5% of unpaid balance.		
20	(d) No charge for service calls during normal working hours.		
21	(e) Per ACC Rules R14-2-603B <u>Residential</u> - two times the average bill.		
22	<u>Non-residential</u> - two and one-half times the average bill.		
23	(f) At cost. Customer/Developer shall install or cause to be installed all Service Laterals as a		
24	non-refundable contribution-in-aid of construction..		
25	(g) All Main Extensions shall be completed at cost and shall be treated as non-refundable		
26	contribution-in-aid of construction.		
27			
28			
29	IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM		
30	ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE		
31	TAX. PER COMMISSION RULE 14-2-608D(5).		
32			
33			
34			
35			
36			

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4 Attorneys for Litchfield Park Service Company
5

6 **BEFORE THE ARIZONA CORPORATION COMMISSION**

7 IN THE MATTER OF THE APPLICATION
8 OF LITCHFIELD PARK SERVICE
COMPANY, AN ARIZONA
9 CORPORATION, FOR A
DETERMINATION OF THE FAIR VALUE
10 OF ITS UTILITY PLANTS AND
PROPERTY AND FOR INCREASES IN ITS
11 WASTEWATER RATES AND CHARGES
FOR UTILITY SERVICE BASED
12 THEREON.

DOCKET NO: SW-01428A-09-0103

13 IN THE MATTER OF THE APPLICATION
14 OF LITCHFIELD PARK SERVICE
COMPANY, AN ARIZONA
CORPORATION, FOR A
15 DETERMINATION OF THE FAIR VALUE
OF ITS UTILITY PLANTS AND
16 PROPERTY AND FOR INCREASES IN ITS
WATER RATES AND CHARGES FOR
17 UTILITY SERVICE BASED THEREON.

DOCKET NO: W-01427A-09-0104

18 IN THE MATTER OF THE APPLICATION
19 OF LITCHFIELD PARK SERVICE
COMPANY, AN ARIZONA
CORPORATION, FOR AUTHORITY (1) TO
20 ISSUE EVIDENCE OF INDEBTEDNESS IN
AN AMOUNT NOT TO EXCEED \$1,755,000
21 IN CONNECTION WITH (A) THE
CONSTRUCTION OF TWO RECHARGE
22 WELL INFRASTRUCTURE
IMPROVEMENTS AND (2) TO
23 ENCUMBER ITS REAL PROPERTY AND
PLANT AS SECURITY FOR SUCH
24 INDEBTEDNESS.

DOCKET NO. W-01427A-09-0116

1 IN THE MATTER OF THE APPLICATION
2 OF LITCHFIELD PARK SERVICE
3 COMPANY, AN ARIZONA
4 CORPORATION, FOR AUTHORITY (1) TO
5 ISSUE EVIDENCE OF INDEBTEDNESS IN
6 AN AMOUNT NOT TO EXCEED \$1,170,000
7 IN CONNECTION WITH (A) THE
8 CONSTRUCTION OF ONE 200 KW ROOF
9 MOUNTED SOLAR GENERATOR
10 INFRASTRUCTURE IMPROVEMENTS
11 AND (2) TO ENCUMBER ITS REAL
12 PROPERTY AND PLANT AS SECURITY
13 FOR SUCH INDEBTEDNESS.

DOCKET NO. W-01427A-09-0120

14 **REBUTTAL TESTIMONY**

15 **of**

16 **THOMAS J. BOURASSA**

17 **on**

18 **COST OF CAPITAL**

19 **(Phase 1 – Determination of Rate Base and Rates)**

20 **December 2, 2009**

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1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND ADDRESS.**

3 A. My name is Thomas J. Bourassa. My business address is 139 W. Wood Drive,
4 Phoenix, Arizona 85029.

5 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS CASE?**

6 A. On behalf of the applicant, Litchfield Park Service Company ("LPSCO" or the
7 "Company").

8 **Q. ARE YOU THE SAME THOMAS J. BOURASSA THAT FILED DIRECT**
9 **TESTIMONY ON RATE BASE, INCOME STATEMENT, REVENUE**
10 **REQUIREMENT AND RATE DESIGN IN THIS DOCKET?**

11 A. Yes, and all of my background information and testimony regarding my
12 qualifications is contained in that portion of my direct testimony.

13 **Q. DID YOU ALSO PREPARE DIRECT TESTIMONY ON THE COST OF**
14 **CAPITAL ON BEHALF OF LPSCO IN THIS CASE?**

15 A. Yes, I also provided direct testimony on the cost of capital, including the cost of
16 equity, in this case.

17 **II. SUMMARY OF REBUTTAL TESTIMONY AND THE PROPOSED COST**
18 **OF CAPITAL FOR THE COMPANY**

19 **A. Summary of Company's Rebuttal Recommendation.**

20 **Q. WHAT IS THE PURPOSE OF THIS REBUTTAL TESTIMONY?**

21 A. In this portion of my rebuttal testimony I will provide updates of my cost of capital
22 analysis and recommended rate of return using more recent financial data. I also
23 will respond as appropriate to the direct testimonies of Mr. Manrique on behalf of
24 Staff and the direct testimony of Mr. William A. Rigsby on behalf of RUCO.

1 **Q. PLEASE SUMMARIZE YOUR UPDATED COST OF CAPITAL**
2 **ANALYSIS.**

3 A. Since the Company's direct filing, the cost of equity has increased substantially, as
4 indicated by the Discounted Cash Flow ("DCF") model and the Capital Asset
5 Pricing Model ("CAPM"). The table below summarizes the results of my updated
6 analysis using those models:

	<u>Range</u>	<u>Midpoint</u>
DCF Constant Growth (earnings growth)	9.3% - 14.9%	12.1%
DCF Constant Growth (sustainable growth)	9.4% - 12.0%	10.7%
Two-Stage Growth Model	9.5% - 13.5%	11.4%
DCF Average Results	9.4% - 13.5%	11.4%
CAPM Historical Market Risk Premium		8.3%
CAPM Current Market Risk Premium		16.7%
Average CAPM Results	8.9%-16.7%	12.5%
Average Overall Results	8.9%-15.1%	12.0%

16 The schedules containing my updated cost of capital analysis are included with my
17 rebuttal schedules, attached to my other rebuttal testimony. Attached to this
18 testimony are five attachments discussed below.

19 I also prepared rebuttal testimony that addresses the Company's rebuttal rate
20 base, its income statement (revenue and operating expenses), its required increase
21 in revenue, and its rate design and proposed rates and charges for service. For the
22 convenience of the Commission and the parties, that volume of my testimony has
23 been filed separately in this case.

24 **Q. PLEASE SUMMARIZE YOUR RECOMMENDED REBUTTAL COST OF**
25 **DEBT AND EQUITY, AND YOUR RECOMMENDED REBUTTAL RATE**
26 **OF RETURN ON RATE BASE.**

1 A. The Company's recommended capital structure consists of 17.9 percent debt and
2 82.1 percent common equity as shown on Rebuttal Schedule D-1. Based on my
3 updated cost of capital analysis, I am recommending a cost of equity of 12.0
4 percent.

5 Based on my 12.0 percent recommended cost of equity, the Company's
6 weighted cost of capital ("WACC") is 11.0 percent, as shown on Rebuttal Schedule
7 D-1.

8 **B. Updates to Direct Testimony.**

9 **Q. WHY IS YOUR COST OF EQUITY RECOMMENDATION LOWER IN**
10 **YOU REBUTTAL THAN IN YOUR DIRECT TESTIMONY?**

11 A. When I prepared my direct testimony in February 2009, the economy was in the
12 midst of a severe recession and a crisis was occurring in the financial markets. The
13 Dow Jones average had fallen by 38 percent and the S&P 500 dropped by 40
14 percent in just a couple of months. During this period, there was a "flight to
15 quality" that led to the traditional spread between required returns on Treasury
16 securities and other assets increasing as investors turned away from common
17 stocks and corporate bonds in favor of treasuries. During the past several months,
18 both the economy and the financial markets have improved. Economists now
19 believe the recession has ended, but also see a long sluggish recovery. As Value
20 Line states "the evolving business upturn may be a checkered affair, with a
21 succession of peaks and valleys along the way...Should [the] uneven recovery
22 unfold, the stock market might remain quite volatile."¹

23 There are several key factors that could cap the strength of economic
24 recovery over the next few years. These include an unusually slow improvement in
25

26 ¹ Value Line Selection and Opinion, October 16, 2009.

1 labor market conditions,² only modest gains in consumer spending, tight credit and
2 a desire by households to pare debt, a slow recovery in residential investment due
3 to still rising home foreclosures and persistently high inventories of unsold existing
4 homes, a further pull-back in commercial construction, limited improvement in
5 capital spending resulting from excess capacity that exists in many sectors, and still
6 lack of capital available to small and mid-sized businesses.³

7 **Q. SO HOW EXACTLY HAS THE COST OF EQUITY DROPPED SINCE**
8 **YOU PREPARED YOUR DIRECT TESTIMONY?**

9 A. My updated analysis indicates cost of equity is 12.0 percent, which is lower than
10 the 14.1 percent indicated cost of equity in my direct testimony. My cost of equity
11 estimates based on the discounted cash flow ("DCF") and the capital asset pricing
12 model ("CAPM") ranged from 9.5 percent to 18.6 percent with a mid-point of 14.1
13 percent. Despite a 14.1 percent indicated cost of equity in my direct cost of equity
14 analysis, my recommendation for the cost of equity was 12.5 percent.

15 **C. Summary of the Recommendations of Staff and RUCO.**

16 **Q. PLEASE SUMMARIZE THE COST OF DEBT AND EQUITY**
17 **RECOMMENDED BY STAFF AND RUCO, AND THEIR RESPECTIVE**
18 **RECOMMENDATIONS FOR THE RATE OF RETURN ON FAIR VALUE**
19 **RATE BASE.**

20 A. Staff determined a cost of equity of 9.2 percent based on the average cost of equity
21 produced by its DCF and CAPM models (10.0 percent) and an 80 basis point
22 downward adjustment for LPSCO's lower financial risk as compared to the
23 publicly traded water utilities in Staff's sample group.⁴ Staff did not consider any

24 ² The unemployment rate recently jumped to 10.2%, which is higher than the unemployment rate
25 during the 2001 recession.

26 ³ Blue Chip Financial Forecasts, Vol. 28, No. 10, October 1, 2009.

⁴ See Direct Testimony of Juan C. Manrique ("Manrique Dt.") at 34.

1 of LPSCO's firm-specific risks other than financial risk. Staff is recommending a
2 capital structure consisting of 17.2 percent debt and 82.8 percent equity.⁵ Based on
3 a capital structure of 17.2 percent debt and 82.8 percent equity, Staff determined
4 the WACC for LPSCO to be 8.7 percent.⁶

5 RUCO determined its recommended cost of equity, 8.01 percent, based on
6 the average cost of equity of its DCF and CAPM results.⁷ RUCO is recommending
7 a recommending a capital structure of 17.8 percent debt and 82.2 percent equity.⁸
8 RUCO's recommended cost of debt is 6.39 percent, based the Company's average
9 cost of debt. Based on a capital structure of 17.8 percent debt and 82.2 percent
10 equity, RUCO computed a WACC of 7.72 percent, which is RUCO's
11 recommended rate of return on FVRB.⁹ RUCO also did not consider firm-specific
12 risks other than financial risk.

13 **II. RESPONSE TO STAFF'S COST OF CAPITAL ANALYSIS**

14 **A. Staff's Financial Risk Adjustment**

15 **Q. DID STAFF RECOMMEND A FINANCIAL RISK ADJUSTMENT?**

16 A. Yes, and my primary criticism of Staff's financial risk adjustment is that a beta for
17 LPSCO is required to make this adjustment, yet LPSCO does not have a beta
18 because it is not publicly traded. Staff assumes the beta of the large publicly traded
19 utility companies is the beta for LPSCO. I believe that LPSCO, if it were publicly
20 traded, would have a higher beta than the sample water utility companies.¹⁰ In
21 Chapter 7 of Morningstar's *Ibbotson SBBI 2009 Valuation Yearbook*, for example,

22 ⁵ *Id.*

23 ⁶ *Id.* at 36.

24 ⁷ See the Direct Testimony of William A. Rigsby ("Rigsby Dt.") at 7.

25 ⁸ *Id.*

26 ⁹ *Id.* at 8.

¹⁰ Bourassa Direct Testimony (Cost of Capital) ("Bourassa Dt.") at 37.

1 Ibbotson reports that when betas are properly estimated, betas are larger for smaller
2 companies than for larger companies. A higher beta for LPSCO would result in a
3 much lower financial risk adjustment using the Hamada method Staff employs.

4 A secondary criticism is that Staff ignores the higher risk of LPSCO due to
5 its small size relative to the sample companies. If Staff is going to make a financial
6 risk adjustment for differences in the capital structures between Staff's water proxy
7 group and LPSCO, it should also consider a small firm risk premium to account for
8 firm size differences. Ibbotson finds that even after accounting for differences in
9 beta risk, small firms require an additional risk premium over and above the added
10 risk premium indicated by differences in beta risk.¹¹ Another reviewer also
11 reported evidence that the stocks of small water utilities, like LPSCO, are more
12 risky than the stocks of larger water utilities, such as those in the water utilities
13 sample.¹² Even the California PUC conducted a study that showed smaller water
14 utilities are more risky than larger ones.¹³ Frankly, it seems to me indisputable that
15 investors require higher returns on small company stocks as compared to large
16 company stocks.

17 As a consequence of smaller firms having higher risks (after accounting for
18 differences in beta risk), an additional small firm risk premium should be
19 considered. In the end, differences in financial risk can be more than offset by the
20 required small firm risk premium.

21
22
23 ¹¹ Ibbotson *SBBI 2009 Valuation Yearbook*, Morningstar (Chapter 7).

24 ¹² Thomas M. Zepp, "Utility Stocks and the Size Effect – Revisited," *The Quarterly Review*
25 *Economics and Finance*, Vol. 43, Issue 3, Autumn 2003, 578-582.

26 ¹³ Staff Report on Issues Related to Small Water Utilities, June 10, 1991 and CPUC Decision 92-03-093.

1 **Q. HAVE YOU PREPARED AN ATTACHMENT SUMMARIZING YOUR**
2 **ASSESSMENT OF THE ADDITIONAL RISK PREMIUMS REQUIRED**
3 **FOR SMALLER FIRMS LIKE LPSCO?**

4 A. Yes. I have included at **TJB-RB-COC (Phase I) Attachment 1** the results of an
5 *Ibbotson* study using annual data reporting the size premium based upon firm size
6 and return data provided in Morningstar *Ibbotson SBBI 2009 Valuation Yearbook*
7 and information contained in a published work by Dr. Thomas M. Zepp. I have
8 estimated that a small company risk premium in the range of 99 to 181 basis points
9 is appropriate. To be conservative, I would estimate a small company risk
10 premium of no less than 100 basis points is warranted for LPSCO. Putting aside
11 the fact that Staff's financial risk adjustment is too high because the beta for
12 LPSCO would be higher than the average beta of Staff's water proxy group, the
13 upward 100 basis point small firm risk premium would more than offset the
14 downward 80 basis point financial risk adjustment recommended by Staff.

15 **Q. DO INVESTORS CONSIDER THESE RISKS?**

16 A. Of course. Contrary to Mr. Manrique's assertion that the risks due to small size
17 and risks associated with the Arizona regulatory requirements use of historic test
18 years and limited out of period adjustments are "unique" risks,¹⁴ the market risk for
19 small utilities and small utilities doing business in Arizona, like LPSCO, is
20 important to investors, and these risks are not captured by the market data of the
21 water utility proxy group Staff uses to estimate the cost of equity for LPSCO.
22 Again, none of the utilities in Staff's water proxy group are of comparable size to
23 LPSCO.¹⁵ In fact, LPSCO is but a small fraction of the size of the water utilities in
24 Staff's water proxy group. Neither are any of the water utilities in Staff's water

25 ¹⁴ Manrique Dt. at 42.

26 ¹⁵ Bourassa Dt. at 18.

1 proxy group subject exclusively to Arizona regulation.¹⁶ Had Mr. Manrique used a
2 proxy group consisting of utilities of similar size to LPSCO and primarily subject
3 to Arizona regulation I would have no argument. But, there is no such market data
4 available.

5 In summary, as I testified, the criteria established by the Supreme Court in
6 decisions such as *Bluefield Water Works* require the use of comparable companies,
7 i.e., companies that would be viewed by investors as having similar risks. A
8 rational investor would not regard LPSCO as having the same level of risk as
9 Aqua America or even Connecticut Water just because they all sell water under
10 state regulation.¹⁷

11 **Q. DO YOU HAVE ANY OTHER CRITICISMS OF STAFF FINANCIAL RISK**
12 **ADJUSTMENT?**

13 A. Yes. Staff uses book values in its Hamada method. This results in an
14 overstatement of the financial risk adjustment. The Hamada method should be
15 based on market values rather than book values.

16 **Q. PLEASE EXPLAIN.**

17 A. Professor Hamada developed his methodology using market values of the firm.
18 Market values are relevant.¹⁸ Other authorities in the subject of finance recognize
19 that market values of the firm are relevant when it comes to leverage and financial
20 risk.¹⁹ This is logical given that Professor Hamada's formula is an extension of the
21

22
23 ¹⁶ *Id.* at 18-19.

24 ¹⁷ *Id.*

25 ¹⁸ "Effects of the Firm's Capital structure on Systematic Risk of Common Stock," *Journal of*
26 *Finance*, Vol. 27 No. 2 (May 1972) 435-453.

¹⁹ Shannon, P. Pratt, *Cost of Capital – Estimations and Applications*, John Wiley & Sons 83-85,
Roger A. Morin. *New Regulatory Finance* (2006) 221-25.

1 CAPM, which is a market-based model that does not consider book or accounting
2 data.

3 **Q. HAS STAFF PROVIDED ANY SUPPORT FOR USING BOOK DEBT AND**
4 **EQUITY?**

5 A. No. Staff's discussion on the subject is sparse.²⁰ It is difficult to address this
6 subject adequately at this time without knowing Staff's rationale and authoritative
7 support for the use of book values. I have been unable to find any authority for
8 using book value in the Hamada formula.

9 **Q. WHAT FINANCIAL RISK ADJUSTMENT HAVE YOU COMPUTED**
10 **USING STAFF'S MODELS AND MARKET VALUES?**

11 A. I computed a downward financial risk adjustment of 50 basis points. I used the
12 market value of equity for the publicly traded water utilities, which I computed
13 using their market-to-book ratios as set forth in Staff's testimony. For debt, I used
14 the book value of debt as the market value. According to Dr. Morin, this is an
15 appropriate assumption.²¹ To compute the market value of LPSCO's equity, I used
16 the market value of LPSCO's equity using the average market-to-book ratio of the
17 sample publicly traded utility companies.

18 **Q. SO STAFF'S HAMADA ADJUSTMENT IS OVERSTATED BY AT LEAST**
19 **40 BASIS POINTS?**

20 A. Yes, but that still does not account for the problem with using the average betas as
21 I discussed above. LPSCO's small size compared to those sample companies taints
22 the use of the beta in the first place, then Staff has overstated it in the second place.
23 Under these circumstances I simply do not believe the evidence supports a
24 financial risk adjustment in the range of 50-80 basis points.

25 ²⁰ Manrique Dt. at 33-34.

26 ²¹ Morin, *supra* at 224.

1 Q. ARE YOU PERSUADED BY MR. MANRIQUE'S TESTIMONY ON PAGE
2 42, WHERE HE REFERENCES PRIOR COMMISSION DECISIONS THAT
3 THE DID NOT FIND A FIRM SIZE PHENOMENON FOR REGULATED
4 UTILITIES?

5 A. No. Frankly, the agency's failure to recognize a small firm risk existence despite
6 an abundance of empirical financial evidence suggesting otherwise is another
7 reason why it is more risky for smaller utilities to do business in Arizona.
8 Investors do recognize the unfavorable regulatory environment here in Arizona. I
9 know first hand because I talk to them in my work. Arizona's regulatory
10 environment may drive investors to invest in utilities in states with more favorable
11 regulatory environments, such as California.²² Three of the six utilities in the
12 Staff's water proxy group are located in California, which offers a more favorable
13 regulatory environment by using future test years and adjustor/balancing accounts
14 in its rate-setting process. As a result, utilities in Arizona are finding it
15 increasingly difficult to attract capital as investors invest their funds in less-risky
16 regulatory environments.

17 B. Response to Staff Criticisms of LPSCO Cost of Capital Analysis

18 Q. PLEASE RESPOND TO MR. MANRIQUE'S TESTIMONY ON THE
19 ARTICLE, "CHOICE AMONG METHODS OF ESTIMATING SHARE
20 YIELD", BY GORDON, GORDON, AND GOULD, WHICH ARTICLE YOU
21 REFERENCED AS SUPPORTING ESTIMATING THE DCF GROWTH
22 RATE.

23 A. Mr. Manrique characterizes the article as merely an "article that describes more
24 generally the methods exclusively using analysts' forecasts [as] 'popular and
25

26 ²² Bourassa Dt. at 15-16; *see also* Rebuttal Testimony of Greg Sorensen (Phase I) at 11.

1 attractive models'; but the article does not support the conclusion that analyst
2 forecasts should be used alone."²³ However, the article reported on a formal study
3 conducted by the authors which concluded:

4 We have compared the accuracy of four methods for
5 estimating the growth component of the discounted cash flow
6 yield on a share: past growth in earnings (KEGR), past
7 growth in dividends (KDGR), past retention growth rate
(KBRG), and forecasts of growth by security analysts
(KFRG)..... For our sample of utility shares, KFRG
8 performed well, with KBRG, KDGR, and KEGR following in
that order, and with KEGR a distant fourth....

9 Before closing, we have three observations to make. First,
10 the superior performance by KFRG should come as no
11 surprise. All four estimates of growth rely upon past data, but
12 in the case of KFRG a larger body of past data is used,
filtered through a group of security analysts who adjust for
abnormalities that are not considered relevant for future
growth...²⁴

13 As I testified, to the extent that past results provide useful indications of
14 future growth prospects, analysts' forecasts or growth would already incorporate
15 that information.²⁵ In addition, a stock's current price reflects known historic
16 information on that company, including its past earnings history.²⁶ If investors rely
17 on such analysts' growth rate forecasts those are the forecasts of relevance to the
18 determination of equity costs.

19 **Q. PLEASE COMMENT ON MR. MANRIQUE'S TESTIMONY ON PAGE 37-**
20 **38 REFERENCING PROFESSOR GORDON'S REMARKS AT THE 30TH**
21 **ANNUAL FORUM OF THE SOCIETY OF UTILITY AND REGULATORY**
22 **FINANCIAL ANALYSTS.**

23 ²³ Manrique Dt. at 37.

24 ²⁴ David A. Gordon, Myron J. Gordon and Lawrence I Gould, "Choice Among Methods of
Estimating Share Yield," *Journal of Portfolio Management* (Spring 1989) 50-55.

25 ²⁵ Bourassa Dt. at 27-28.

26 ²⁶ *Id.*

1 A. First, let me state that I do not know the context upon which Professor Gordon
2 made his remarks. Further, in the quoted remarks, Professor Gordon does not say
3 anything about past growth rates. There is no reference in the quotation as to
4 which past growth rates (EPS, DPS, book value) should be used, if any, or what
5 weighting past growth rates should be given when estimating the growth rate for
6 the DCF model.²⁷ Having said that, Mr. Manrique confirms "Professor Gordon
7 would temper the typically higher analysts' growth rates with the typically lower
8 GNP growth rate."²⁸ I am sure Mr. Manrique would agree that I have done this in
9 my two-stage DCF model.²⁹ The result of my two-stage DCF model indicates a
10 cost of equity of 10.9 percent. Compare that to Staff's overall DCF results of 9.7
11 percent.³⁰ So, having tempered the analysts' growth rates I employ with a lower
12 GNP, my estimate is still significantly greater than Staff's. This is the result of
13 Staff's models being heavily weighted on low historical growth rates.

14 **Q. DOES MR. MANRIQUE STATE THAT INVESTORS RELY ON ANALYST**
15 **ESTIMATES?**

16 A. Yes.³¹ He also states that investors rely "to some extent on past growth as well."
17 However, he does not provide support as to what extent investors rely on past
18 growth rates, only that they are considered. Staff's approach to estimating the
19 growth rate gives 50 percent weight to historic growth rates. If analyst estimates
20 already consider past growth, then Staff vastly overstates the impact of past growth
21 rates in its growth rates. And, by utilizing past growth rates that produce extremely
22 low results, Staff biases its DCF results downward.

23 ²⁷ Staff has not provided Professor Gordon's complete remarks in their work papers.

24 ²⁸ Manrique Dt. at 38.

25 ²⁹ Rebuttal Schedule D.4-10.

26 ³⁰ See Staff Schedule JCM-3.

³¹ Manrique at 38.

1 **Q. PLEASE EXPLAIN.**

2 A. I have prepared two exhibits that demonstrate the unrealistically low results
3 produced by Staff's historical growth rates. **TJB-RB-COC (Phase I) Attachment**
4 **2** and **TJB-RB-COC (Phase I) Attachment 3** show the DCF results produced by
5 Staff's historical DPS and EPS growth rates. For example, as shown in **TJB-RB-**
6 **COC (Phase I) Attachment 2**, Staff's historical DPS growth rates produce
7 indicated costs of equity *below* the cost of debt for 3 of the 6 publicly traded water
8 utilities in Staff's water proxy group – one as low as 3.9 percent. The average
9 indicated cost of equity is 6.6 percent, which is nearly at the current cost of Baa
10 investment grade bonds at 6.3 percent and well below the expected Baa investment
11 grade bond cost of 7.4 percent during the period of time new rates will be in effect.
12 As shown in **TJB-RB-COC (Phase I) Attachment 3**, Staff's historical EPS
13 growth rate produces indicated costs of equity *below* the cost of debt for 3 of the 6
14 publicly traded water utilities in Staff's water proxy group – one as low as 4.9
15 percent. Again, the average indicated cost of equity is only 6.8 percent, not much
16 above the current cost of Baa investment grade bonds and well below the expected
17 cost of Baa investment grade bonds during the period of time new rates will be in
18 effect. Thus, while Mr. Manrique criticizes my use of analyst estimates, he does
19 not explain why growth rates which produce indicated costs of equity below the
20 cost of debt are reasonable and should be given 50 percent weight in his DCF
21 growth estimate computation.

22 **Q. DO YOU HAVE OTHER COMMENTS IN RESPONSE TO MR.**
23 **MANRIQUE'S TESTIMONY ON ANALYST ESTIMATES?**

24 A. Yes. Mr. Manrique's reliance on the quote from Jeremy Siegel that dividends and
25 not earnings are meaningful is puzzling.³² My first comment is that the DCF

26 ³² Manrique Dt. at 40.

1 model assumes, among other things, that a firm will have a stable dividend payout
2 policy and a stable earned return on book value. Thus, the stock price, book value,
3 dividends, and earnings all grow at the same rate. While it is appropriate to make
4 such assumptions for forecasting purposes, these assumptions are frequently
5 violated when examining historical data. As it turns out, the historical growth in
6 the stock price, book value, dividends, and earnings for the water have not been the
7 same.³³ As a result, estimates of long-term growth rates should take this into
8 account.

9 Second, I have not used earnings in my DCF model; I used earnings growth
10 as a proxy for growth. It is from earnings that cash flows are generated to pay
11 dividends. Growth in earnings provides more cash flows from which to pay
12 dividends. As a consequence, earnings growth is a meaningful and appropriate
13 proxy for growth in the DCF model.

14 Finally, I do not disagree with Professor Siegel that the price of a stock is
15 the always equal to the present value of all future cash flows. I am sure Professor
16 Siegel would agree that future cash flows would not only include dividends by the
17 future selling price of the stock. The Market Price version of the DCF model
18 measures precisely that. I described the Market Price version of the DCF model in
19 my direct and will not repeat that testimony here.³⁴ Putting that aside, a 10 year
20 Market Price DCF model for the sample publicly traded utility stocks would
21 indicate a cost of equity of 12.8 percent.

22
23
24
25 ³³ See Rebuttal Schedule D.4-3 and Rebuttal Schedule D.4-4.

26 ³⁴ Bourassa Dt. at 24-25.

1 **Q. HAVE YOU PREPARED AN EXHIBIT ILLUSTRATING THE MARKET**
2 **PRICE DCF FOR THE WATER UTILITY SAMPLE?**

3 A. Yes. At TJB-RB-COC (Phase I) Attachment 4 I have included a Market Price
4 DCF computation for the sample publicly traded water utilities using 10 year
5 historical dividend growth and 10 year historical stock price growth. Again, the
6 average result is 12.8 percent (12.1 percent median) which compares far more
7 favorably to my cost of equity estimate of 12.0 percent than to Staff's cost of
8 equity estimate of 10.0 percent.

9 **III. RESPONSE TO RUCO'S COST OF CAPITAL ANALYSIS**

10 A. **Use of Gas Utilities to Develop Cost of Equity**

11 **Q. HOW DOES THE SAMPLE OF WATER UTILITIES MR. RIGSBY USED**
12 **TO ESTIMATE THE COST OF EQUITY COMPARE TO THE UTILITIES**
13 **USED BY THE COMPANY AND STAFF?**

14 A. Mr. Rigsby used three publicly traded water utilities. He used the three largest
15 water utilities out of the six water utilities that I have used and Staff typical uses
16 when performing its cost of capital analysis.

17 **Q. DOES MR. RIGSBY ALSO USE SAMPLE GAS COMPANIES TO**
18 **DEVELOP HIS ESTIMATE OF THE COST OF EQUITY? HOW DO**
19 **THEY COMPARE TO THE SAMPLE WATER COMPANIES?**

20 A. Yes. He uses ten natural gas companies. However, the sample gas utilities are less
21 risky and therefore not comparable to water utilities. His sample water companies,
22 for example, have an average beta of 0.83, while his sample gas companies have an
23 average beta of just 0.67.³⁵ That means that the equity cost for the water utility
24 should be greater than the gas companies, based on their relative riskiness.

25
26 ³⁵ See RUCO Schedule WAR-7, page 1 of 2.

1 The water utility sample has more systematic risk than the gas utility
2 sample. Mr. Rigsby erroneously assumes that the gas utilities and water utility
3 have the same systematic risk and are directly comparable, when they are not.

4 **Q. CAN THE GAS UTILITIES BE USED TO ESTIMATE LPSCO'S COST OF**
5 **EQUITY?**

6 A. Yes, if the results produced by the DCF and CAPM models are adjusted upward to
7 reflect the water utilities' additional risk. Mr. Rigsby, however, has made no
8 adjustment to account for the water utilities' additional risk.

9 **Q. HAS THIS ISSUE EVER COME UP BEFORE?**

10 A. Yes. In several prior cases, water utilities presented evidence of the cost of equity
11 using financial data for a similar group of publicly traded gas companies, which at
12 that time had a higher average beta than the water utility sample. In rejecting this
13 evidence, the Commission adopted Staff's argument that because the water utility
14 sample had a lower average beta than the gas utility sample, the cost of equity for
15 the water utility should be lower. For example, in Arizona Water Company's
16 Eastern Group rate case, the water utility sample had an average beta of 0.59, while
17 the gas utility sample had an average beta of 0.69. Staff estimated that based on
18 the difference in the two groups' betas, the sample gas companies has an equity
19 cost that is 100 basis points higher than the water utilities.³⁶

20 **Q. WHAT IS THE IMPACT OF RUCO'S USE OF THE GAS UTILITIES TO**
21 **ESTIMATE THE COST OF EQUITY IN THIS CASE?**

22 A. By averaging the results of his equity cost estimate for the water utility sample with
23 his equity cost estimate for the gas utility sample, Mr. Rigsby has depressed the
24 cost of equity estimates. For example, the average of Mr. Rigsby's CAPM

25 ³⁶ Decision No. 66849 (March 19, 2004) at 21; *see also Arizona-American Water Company*
26 *Decision No. 67093 (June 30, 2004) at 27.*

estimates for the water companies and gas companies are 6.71 percent and 5.88 percent, respectively. This is an 83 basis point difference.

Q. HOW WOULD AN APPROPRIATE RISK ADJUSTMENT BE CALCULATED?

A. By using the CAPM. As I explained above, the difference between the results produced by Mr. Rigsby's CAPM model is 83 basis points. Because of the method used by Mr. Rigsby to implement the CAPM, however, 83 basis points understates the required adjustment to properly reflect the gas utilities' lower investment risk. If my method and inputs are used instead, similar to the method used in the aforementioned Arizona Water Eastern Group case, the result is 140 basis points, calculated as follows:

	<u>Rf</u>		<u>Beta</u>		<u>Rp</u>		<u>K</u>
Historic MRP	2.8%	+	0.67	X	6.9%	=	7.4%
Current MRP	4.3%	+	0.67	X	15.5%	=	<u>14.7%</u>
Average Gas Utility Sample							<u>11.1%</u>
Average Water Utility Sample ³⁷							<u>12.5%</u>
Difference/Risk Adjustment							1.4%

Given this difference, it is clearly inappropriate to simply average the gas utilities' equity cost with the water utilities' equity cost, as Mr. Rigsby has done. This error assumes that a typical gas utility has the same investment risk as a typical water utility, which is simply not the case at the present time. As a result, Mr. Rigsby's use of gas utilities depresses the cost of equity for LPSCO.

³⁷ See Rebuttal Schedule D-4.13.

1 **B. Criticisms of RUCO's Implementation of the CAPM**

2 **Q. WHAT OTHER CONCERNS DO YOU HAVE WITH RESPECT TO MR.**
3 **RIGBY'S CAPM ANALYSIS?**

4 A. I have four other concerns with respect to Mr. Rigsby's CAPM analysis. First,
5 Mr. Rigsby employs a geometric average in calculating the market risk premium in
6 his CAPM. His choice to use geometric average depresses his cost of equity
7 estimate downward. An arithmetic average is the correct approach to use in
8 estimating the cost of capital, as various experts have explained.³⁸ In fact, the
9 CAPM was developed on the premise of expected returns being averages and risk
10 being measured with the standard deviation. As Dr. Morin states,

11 Since the latter [standard deviation] is estimated around the
12 arithmetic average, and not the geometric average, it is logical
13 to stay with arithmetic averages to estimate the market risk
14 premium. In fact, annual returns are uncorrelated over time,
 and the objective is to estimate the market risk premium for
 the next year, the arithmetic average is the best unbiased
 estimate of the premium.³⁹

15 Attached at **TJB-RB-COC (Phase I) Attachment 5** is an excerpt from Dr.
16 Roger Morin's textbook on regulatory finance, which provides a detailed
17 discussion of this issue.⁴⁰

18 Second, Mr. Rigsby uses the U. S. Treasury total returns in his computation
19 when he should have used U.S. Treasury income returns. As I explained in my
20 direct testimony, the market risk premium is calculated by subtracting the risk-free
21 rate from the market return.⁴¹ Mr. Rigsby erroneously used the average total return

22
23 ³⁸ Richard A. Brealey and Stewart C. Myers, *Principles of Corporate Finance* 156-157 (7th ed.
24 2003); Roger A. Morin, *New Regulatory Finance* 156-157 (Public Utility Reports, Inc. 2006)
 ("Morin"); *Ibbotson SBBI 2009 Valuation Yearbook* 59-62.

25 ³⁹ *Morin, supra*, at 157-157.

26 ⁴⁰ *Morin* at 133-43.

⁴¹ *Bourassa Dt.* at 29.

1 on a Treasury security rather than the average income return. As shown on
2 Schedule WAR-7, at page 2, attached to Mr. Rigsby's direct testimony, the total
3 return used to calculate the market risk premium was 5.6 percent. This was the
4 average total return on an intermediate-term Treasury (1926-2008) as published in
5 the *2009 Ibbotson SBBI Valuation Edition Yearbook* (Table 2-1). By contrast, the
6 average income return for an intermediate-term Treasury security was 4.7 percent.

7 The reason that an average income return must be used, rather than the
8 average total return, is quite straightforward. The CAPM is a risk premium
9 methodology that is based on the premise that an investor expects to earn a return
10 equal to the return on a risk-free investment, plus a premium for assuming
11 additional risk that is proportional to the security's market risk (i.e., its beta). U.S.
12 Treasuries are commonly used as a proxy for the risk-free rate because they are
13 backed by the United States government, effectively eliminating default risk. The
14 income return is the portion of the total return that results from the bond's periodic
15 cash flow, i.e., the interest payments. The income return provides an unbiased
16 estimate of the riskless rate of return because an investor can hold the Treasury
17 security to maturity and receive fixed interest payments with no capital loss or
18 capital gain. If the total return on a Treasury security is used instead, additional
19 risk is injected into the CAPM estimate, which is inconsistent with treating the
20 security as a riskless asset. As explained by *Ibbotson*:

21 Another point to keep in mind when calculating the equity
22 risk premium is that the income return on the appropriate-
23 horizon Treasury security, rather than the total return, is used
24 in the calculation. The total return is comprised of three
25 return components: the income return, the capital appreciation
26 return, and the reinvestment return. The income return is
defined as the portion of the total return that results from a
periodic cash flow or, in this case, the bond coupon payment.
The capital appreciation return results from the price change
of a bond over a specific period. Bond prices generally
change in reaction to unexpected fluctuations in yields.

1 Reinvestment return is the return on a given month's
2 investment income when reinvested into the same asset class
3 in the subsequent months of the year. The income return is
4 thus used in the estimation of the equity risk premium
5 because it represents the truly riskless portion of the return.⁴²

6 As a consequence of incorrectly using U.S. Treasury total returns and well
7 as geometric means, RUCO's CAPM estimate dramatically understates the cost of
8 equity for the water utility sample. If an intermediate-term Treasury security is
9 used as the proxy for the risk-free rate of return, the market risk premium would
10 increase to 6.9 percent from 6.1 percent using the conceptually correct arithmetic
11 averages. If that market risk premium is substituted for the 6.1 percent market risk
12 premium used by Mr. Rigsby, the arithmetic mean CAPM cost of equity for his
13 water utility sample would increase from 7.5 percent to 8.2 percent – an increase of
14 70 basis points.

15 Third, Mr. Rigsby has ignored current market risk. This Commission has
16 consistently approved the use of a current market risk premium in implementing
17 the CAPM in water and wastewater utility rate cases. In the Chaparral City case,⁴³
18 for example, the Commission adopted cost of capital used an historic market risk
19 premium and a current market risk premium in its CAPM estimates.⁴⁴ RUCO,
20 however, has ignored current market risk in its CAPM estimates and has relied
21 instead on incorrectly calculated historic market risk premiums.

22 Changes in the current market risk premium have been a significant factor in
23 the cost of equity authorized by the Commission for water and wastewater utilities.

24 ⁴² *Ibbotson at 75-76.*

25 ⁴³ *Chaparral City Water Company*, Decision No. 68176 (September 30, 2005).

26 ⁴⁴ *See* Direct Testimony of Alejandro Ramirez, Docket No. W-02113A-04-0616 (March 22, 2005); Surrebuttal Testimony of Alejandro Ramirez, Docket No. W-02113A-04-0616 (May 5, 2005).

1 In Arizona Water Company's Eastern Group case, filed in 2002, Staff computed a
2 current market risk premium of 13.1 percent in its CAPM estimate, and relied on
3 that market risk premium in estimating a cost of equity of 9.2 percent, using the
4 same six sample water utilities.⁴⁵ At that time, the country was in the midst of a
5 recession, and, according to Staff, interest rates had fallen to the lowest levels since
6 the 1950s.⁴⁶ Moreover, the average beta of Staff's water utility sample group was
7 only 0.59 at that time, indicating that investment risk for the water utility industry
8 was low relative to the market.⁴⁷

9 Two years later, Arizona Water Company filed a rate case for its Western
10 Group systems. Interest rates had increased from the levels in 2003, and the
11 average beta of the Staff's sample utilities had increased as well, indicating greater
12 investment risk. However, Staff's cost of equity estimate was virtually identical to
13 the Eastern Group case, 9.1 percent.⁴⁸ The primary reason was that Staff's current
14 market risk premium had dropped from 13.1 percent to 7.8 percent.⁴⁹ The
15 Commission, in adopting Staff's CAPM estimate, relied on this change, explaining
16 that "while interest rates have gone up, the cost of equity for the market as a whole
17 has decreased, while the cost of equity for utilities has remained relatively
18 stable."⁵⁰

20
21 ⁴⁵ Decision No. 66849 at 21 (March 19, 2004); *see also* Direct Testimony of Joel M. Reiker,
Docket No. W-01445A-02-0619, 24-25 (July 8, 2003).

22 ⁴⁶ Direct Testimony of Joel M. Reiker, Docket No. W-01445A-02-0619, 5 (July 8, 2003).

23 ⁴⁷ Direct Testimony of Joel M. Reiker, Docket No. W-01445A-02-0619, 23 (July 8, 2003); *see also* Decision No. 66849 at 20.

24 ⁴⁸ Surrebuttal Testimony of Alejandro Ramirez, Docket No. W-01445A-04-0650, Sch. AXR-8
(May 25, 2005).

25 ⁴⁹ *Id.*

26 ⁵⁰ *Arizona Water Co. (Western Group)*, Decision No. 68302 at 38 (Nov. 14, 2005).

1 Even more recently, in Black Mountain Sewer Corporation's rate case, the
2 Commission relied on a further decline in the current market risk premium to
3 support Staff's recommended 9.6 percent cost of equity.⁵¹ In that case, interest
4 rates and the average beta of the sample group were even higher than 2003 levels,
5 and while the result produced by Staff's models was higher, the increase was not as
6 large as would be expected.⁵² The reason was that the current market risk premium
7 had decreased to only 5.7 percent, reducing the result produced by the CAPM.
8 Thus, while interest rates increased and the investment risk of the water utility
9 sample had increased, Staff explained that those increases were offset by a further
10 decline in the current market risk premium, indicating that the overall risk of the
11 market had declined.⁵³

12 As these decisions show, not only has the Commission consistently
13 considered the current market risk premium, but changes in the current market risk
14 premium have had a major impact on the cost of equity, offsetting changes in
15 interest rates and water utility betas in recent cases. Further, RUCO's witness has
16 acknowledged the importance of considering current market conditions in
17 determining the cost of equity:

18 Consideration of the economic environment is necessary
19 because trends in interest rates, present and projected levels
20 of inflation, and the overall state of the U.S. economy
21 determine the rate of return that investors earn on their
invested funds. Each of these factors represent potential risks
that must be weighed when estimating the cost of equity

22 ⁵¹ *Black Mountain Sewer Corp.*, Decision No. 69164 (Dec. 5, 2006).

23 ⁵² In the Black Mountain case, the intermediate-term Treasury used by Staff in its CAPM was 4.8
24 percent, while the average beta of Staff's sample group was 0.74. Surrebuttal Testimony of Pedro
25 M. Chaves, Docket No. SW-02361A-05-0657, Sch. PMC-2 (May 4, 2006). In Arizona Water's
Eastern Group case, in contrast, the intermediate-term Treasury used by Staff in its CAPM was
3.3 percent, while the average beta of Staff's sample group was 0.59. Direct Testimony of Joel
M. Reiker, Docket No. W-01445A-02-0619, Sch. JMR-7 (July 8, 2003).

26 ⁵³ *Black Mountain Sewer Corp.*, Decision No. 69164 at 25-26 (Dec. 5, 2006).

1 capital for a regulated utility and are, most often, the same
2 factors considered by individuals who are also investing in
non-regulated entities.⁵⁴

3 In light of the current volatility in the financial markets, the failure to
4 consider current market risk would grossly distort the CAPM result. Consequently,
5 RUCO's use of two historic market risk premiums (one of which is conceptually
6 wrong for the reasons given previously) without considering the impact of current
7 market risk on investor expectations invalidates RUCO's cost of equity estimate.

8 Finally, and perhaps most importantly of all, three of the four of
9 Mr. Rigsby's CAPM estimates (one for water and two for the gas utilities), as well
10 as his overall CAPM result, are at or below the current cost of Baa investment
11 grade bonds. The current cost of investment grade bonds is 6.3 percent.⁵⁵ The
12 following are the results of Mr. Rigsby's CAPM as shown on WAR-1, page 3 of 3:

13	Geometric mean CAPM estimate - water companies	5.92%
14	Arithmetic mean CAPM estimate - water companies	7.49%
15	Geometric mean CAPM estimate - gas companies	5.25%
16	Arithmetic mean CAPM estimate - gas companies	<u>6.51%</u>
17	Overall CAPM result	6.29%

18
19 A simple reality check should have caused Mr. Rigsby to question his inputs
20 to the CAPM. This clearly demonstrates that RUCO's methods are not only biased
21 downward, but should not be used.

22 **Q. DOES THAT CONCLUDE YOUR REBUTTAL TESTIMONY?**

23 **A. Yes.**

24
25 ⁵⁴ Rigsby Dt. at 38.

26 ⁵⁵ Federal Reserve, November 23, 2009.

**BOURASSA REBUTTAL
COST OF CAPITAL SCHEDULES
(Phase I)**

Litchfield Park Service Company - Water Division

Test Year Ended September 30, 2008

Summary of Cost of Capital

Exhibit
Schedule D-1
Page 1
Witness: Bourassa

End of Test Year

End of Projected Year

Line No.	Item of Capital	End of Test Year			End of Projected Year		
		Dollar Amount	Percent of Total	(e) Cost Rate	Weighted Cost	Dollar Amount	Percent of Total
1	Long-Term Debt	11,506,844	17.86%	6.39%	1.14%	\$ 11,274,570	16.61%
2							
3	Stockholder's Equity ¹	52,906,962	82.14%	12.00%	9.86%	56,603,834	83.39%
4							
5	Totals	\$ 64,413,805	100.00%		11.00%	\$ 67,878,403	100.00%
6							
7							
8	¹ Adjustments to equity						
9	Accum. depreciation adjustments (Water and Wastewater) per Direct	\$ (516,971)					
10	CIAC adjustments (Water and Wastewater) per Direct	\$ 604,222					
11	Deferred Income Taxes (Water and Wastewater) per Direct	\$ 633,536					
12	Deferred Income Taxes (Water and Wastewater) per Rebuttal	\$ (745,742)					
13							
14							
15							
16							
17							
18							
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31							
32							
33							

SUPPORTING SCHEDULES:

D-1
D-3
D-4
E-1

RECAP SCHEDULES:

A-3

Cost of Long Term Debt

Page 1

Supporting Schdules:
E-2

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Cost of Preferred Stock

Exhibit
Schedule D-3
Page 1
Witness: Bourassa

Line No.	Description of Issue	<u>End of Test Year</u>			<u>End of Projected Year</u>		
		<u>Shares Outstanding</u>	<u>Amount</u>	<u>Dividend Requirement</u>	<u>Shares Outstanding</u>	<u>Amount</u>	<u>Dividend Requirement</u>
1							
2							
3	NOT APPLICABLE, NO PREFERRED STOCK ISSUED OR OUTSTANDING						
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17	SUPPORTING SCHEDULES:				RECAP SCHEDULES:		
18	(a) E-1				(a) D-1		
19							
20							

Litchfield Park Service Company - Water Division
Test Year Ended September 30, 2008
Cost of Common Equity

Exhibit
Schedule D-4
Page 1
Witness: Bourassa

Line

No.

1

2

The Company is proposing a cost of common equity of 12.00% .

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SUPPORTING SCHEDULES:

18

(a) E-1

RECAP SCHEDULES:

19

(a) D-1

20

Litchfield Park Service Company
Summary of Results

Exhibit
Rebuttal Schedule D-4.0
Witness: Bourassa

Line No.	Method	Low	High	Midpoint
1				
2				
3				
4				
5	DCF Constant Growth	9.3%	14.9%	12.1%
6	DCF Sustainable Growth	9.4%	12.0%	10.7%
7	DCF Two-Stage	9.5%	13.5%	11.5%
8				
9	Average DCF Results	9.4%	13.5%	11.4%
10				
11	CAPM	8.3%	16.7%	12.5%
12				
13	Average DCF and CAPM Results	8.9%	15.1%	12.0%
14				
15				
16				
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18				
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25				
26				
27				
28				

**Litchfield Park Service Company
Selected Characteristics of Water Utilities**

Exhibit
Rebuttal Schedule D-4.1
Witness: Bourassa

Line No.	Company	% Water Revenues	Operating Revenues (millions)	Net Plant (millions)	S&P Bond Rating	Moody's Bond Rating
1	1. American States	76%	\$ 342.6	\$ 744.9	A	A2
2	2. Aqua America	93%	\$ 658.8	\$ 3,479.8	AA-	NR
3	3. California Water	98%	\$ 435.1	\$ 1,026.3	AA-	NR
4	4. Connecticut Water	93%	\$ 66.2	\$ 260.3	AAA	NR
5	5. Middlesex	89%	\$ 90.8	\$ 327.0	A	NR
6	6. SJW Corp.	95%	\$ 217.3	\$ 509.5	NR	NR
7						
8						
9						
10						
11	Average	91%	\$ 301.8	\$ 1,058.0		
12						
13	Litchfield Park Service Company	100%	\$ 13.2	\$ 116.3	NR	NR
14						

Source: AUS Utility Reports (November 2009)

Line No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

**Litchfield Park Service Company
Capital Structures of Water Utilities**

Exhibit
Rebuttal Schedule D-4.2
Witness: Bourassa

No.	Company	Book Value		Market Value	
		Long-Term <u>Debt</u>	Common <u>Equity</u>	Long-Term <u>Debt</u>	Common <u>Equity</u>
1	1. American States	46.2%	53.8%	32.5%	67.5%
2	2. Aqua America	54.1%	45.9%	36.7%	63.3%
3	3. California Water	41.7%	58.3%	28.0%	72.0%
4	4. Connecticut Water	47.0%	53.0%	32.2%	67.8%
5	5. Middlesex	46.2%	53.8%	35.7%	64.3%
6	6. SJW Corp.	46.0%	54.0%	34.9%	65.1%
7					
8					
9					
10					
11	Average	46.9%	53.1%	33.3%	66.7%
12					
13	Litchfield Park Service Company	17.8%	82.2%	N/A	N/A
14					
15					
16					
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18					
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21					
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24					
25					
26					
27					
28					

Source: Value Line Analyzer Data (November 20, 2009)

Exhibit
Rebuttal Schedule D-4.3
Page 1
Witness: Bourassa

¹ See Schedule D-4.5

Value Line Data
Yahoo Finance

Litchfield Park Service Company
Comparisons of Past and Future Estimates of Growth

Exhibit
 Rebuttal Schedule D-4.4
 Page 1
 Witness: Bourassa

Line No.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
	<u>Ten-year historical average annual changes</u>						
		Book			Average	Average	Average of
		Value	DPS	EPS	Col 1-4	Future	Future and
	Price					Growth ¹	Historical
1. American States	9.72%	4.83%	1.76%	3.68%	5.00%	6.13%	Col 5-6
2. Aqua America	9.75%	9.00%	6.97%	6.20%	7.98%	8.78%	5.56%
3. California Water	8.42%	3.51%	0.90%	2.74%	3.89%	7.33%	8.38%
4. Connecticut Water	6.28%	3.78%	1.22%	1.45%	3.18%	11.00%	5.61%
5. Middlesex	7.37%	4.35%	1.91%	2.29%	3.98%	8.00%	7.09%
6. SJW Corp.	14.89%	5.89%	6.01%	3.64%	7.61%	11.67%	5.99%
							9.64%
GROUP AVERAGE	9.40%	5.23%	3.13%	3.33%	5.27%	8.82%	7.04%
GROUP MEDIAN	9.07%	4.59%	1.84%	3.19%	4.49%	8.39%	6.54%

¹ See Schedule D-4.5

Sources:

Value Line Data
 Yahoo Finance

Line No.
 1
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Litchfield Park Service Company
Analysts Forecasts of Earnings Per Share Growth

Exhibit
 Rebuttal Schedule D-4.5
 Witness: Bourassa

Line No.	(1)	(2)	(3)	(4)	(5)
	EPS GROWTH				Average Growth (G)
	<u>Zacks</u>	<u>Morningstar</u>	<u>Yahoo</u>	<u>Value Line</u>	<u>(Cols 1-3)</u>
1. American States	4.00%	7.00%	4.00%	9.50%	6.13%
2. Aqua America	8.00%	8.80%	8.33%	10.00%	8.78%
3. California Water	7.00%	7.30%	6.00%	9.00%	7.33%
4. Connecticut Water	9.00%		15.00%	9.00%	11.00%
5. Middlesex	9.00%	8.00%	8.00%	7.00%	8.00%
6. SJW Corp.		15.00%	10.00%	10.00%	11.67%
GROUP AVERAGE	7.40%	9.22%	8.56%	9.08%	8.82%
GROUP MEDIAN					8.39%

Sources:

Value Line Investment Analyzer Data November 20, 2009
 Zacks Investment Research Website November 20, 2009
 Morningstar Website November 20, 2009
 Yahoo Finance Website November 20, 2009

Litchfield Park Service Company
Estimates of Sustainable Growth

Exhibit
Rebuttal Schedule D-4.6
Witness: Bourassa

Line No.	(1)	(2)	(3)	(4)	(5)
	Retention Ratio	Rate of Return	br Growth	sv Growth	Average Sustainable Growth (Cols 3+4)
1. American States	0.52	12.00%	6.23%	2.56%	8.79%
2. Aqua America	0.48	11.50%	5.52%	0.43%	5.95%
3. California Water	0.49	12.00%	5.93%	0.98%	6.91%
4. Connecticut Water					
5. Middlesex					
6. SJW Corp.					
GROUP AVERAGE	0.50	11.83%	5.89%	1.32%	7.22%
GROUP MEDIAN	0.49	12.00%	5.93%	0.98%	6.91%
Sources:					
Value Line Data					

Litchfield Park Service Company
Estimates of sv Growth

Exhibit
Rebuttal Schedule D-4.7
Witness: Bourassa

Line No.	(1)	(2)	(3)	(4)
	Stock Financing Rate	Current Market to Book Ratio	V	sv Growth
1. American States	5.84%	1.78	0.44	2.56%
2. Aqua America	0.85%	2.03	0.51	0.43%
3. California Water	2.14%	1.84	0.46	0.98%
4. Connecticut Water				na
5. Middlesex				na
6. SJW Corp.				na
GROUP AVERAGE	2.95%	1.88	0.47	1.32%
GROUP MEDIAN	2.14%	1.84	0.46	0.98%
Sources:				
Value Line Data				

Litchfield Park Service Company
Discounted Cash Flow Analysis (Water)
Constant Growth DCF Model
Using Projected EPS Growth

Exhibit
 Rebuttal Schedule D-4.8
 Witness: Bourassa

Line No.	(1)	(2)	(3)	(4)	(5)
	Company	Spot Price (Po)	Next Year's Div (D1)	Dividend Yield	Indicated Cost of Equity k=Div Yld + g (Cols 3+4)
1	1. American States	31.94	1.02	3.19%	9.3%
2	2. Aqua America	15.88	0.54	3.40%	12.2%
3	3. California Water	35.78	1.18	3.30%	10.6%
4	4. Connecticut Water	22.80	0.89	3.91%	14.9%
5	5. Middlesex	15.91	0.71	4.47%	12.5%
6	6. SJW Corp.	22.18	0.72	3.25%	14.9%
7					
8					
9					
10					
11					
12					
13					
14					
15	GROUP AVERAGE			3.59%	12.4%
16	GROUP MEDIAN				12.3%

¹ See Schedules D-4.5

Sources:

Value Line Investment Analyzer Data November 20, 2009
 Yahoo Finance Website November 20, 2009

Line No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

Litchfield Park Service Company
Discounted Cash Flow Analysis (Water)
Constant Growth DCF Model - Sustainable Growth

Exhibit
 Rebuttal Schedule D-4.9
 Witness: Bourassa

Line No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Company	Spot Price (Po)	Next Year's Div (Dt)	Dividend Yield	Sustainable Growth ¹	br+sv Growth (g)	Indicated Cost of Equity k=Div Yld + g (Cols 3+6)
1	1. American States	31.94	1.02	3.19%	br 6.23%	vs 2.56%	8.79%
2	2. Aqua America	15.88	0.54	3.40%	5.52%	0.43%	5.95%
3	3. California Water	35.78	1.18	3.30%	5.93%	0.98%	6.91%
4	4. Connecticut Water	22.80	0.89	3.91%			7.22%
5	5. Middlesex	15.91	0.71	4.47%			7.22%
6	6. SJW Corp.	22.18	0.72	3.25%			7.22%
7							12.0%
8							9.4%
9							10.2%
10							11.1%
11							11.7%
12							10.5%
13							
14							
15	GROUP AVERAGE			3.59%			10.8%
16	GROUP MEDIAN						10.8%

¹ See Schedule D-4.6 and D-4.7

Sources:

Value Line Investment Analyzer Data November 20, 2009
 Yahoo Finance Website November 20, 2009

Litchfield Park Service Company
Discounted Cash Flow Analysis (Water)
Two-Stage Growth - Projected

Exhibit
Rebuttal Schedule D-4.10
Witness: Bourassa

Line No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Company	Spot Price(P ₀)	Next Year's Div (D ₁)	Yield (D ₁ /P ₀)	Near Term ¹	Projected Growth Rates Long Term (GDP)	Average ²
1	1. American States	31.94	1.02	3.19%	6.13%	6.70%	6.31%
2	2. Aqua America	15.88	0.54	3.40%	8.78%	6.70%	8.10%
3	3. California Water	35.78	1.18	3.30%	7.33%	6.70%	7.12%
4	4. Connecticut Water	22.80	0.89	3.91%	11.00%	6.70%	9.58%
5	5. Middlesex	15.91	0.71	4.47%	8.00%	6.70%	7.57%
6	6. SJW Corp.	22.18	0.72	3.25%	11.67%	6.70%	10.03%
7							
8							
9							
10							
11							
12							
13							
14							
15	GROUP AVERAGE			3.59%			8.12%
16	GROUP MEDIAN						
							11.7%
							11.8%

¹ See Schedule D-4.5

² Near term growth given weighting of .67

Exhibit
Rebuttal Schedule D-4.11
Witness: Bourassa

Litchfield Park Service Company
Market Betas

Line No.	Company	
1	American States	0.80
2	Aqua America	0.65
3	California Water	0.75
4	Connecticut Water	0.85
5	Middlesex	0.80
6	SJW Corp.	0.95
8	Average	0.80

Source:
Value Line Investment Analyzer Data November 20, 2009

Litchfield Park Service Company
Computation of Current Market Risk Premium

Line No.	Month	Dividend Yield (D/P) ¹	Expected Dividend Yield (D/P) ²	Growth (g) ³	Expected Market Return (k)	Monthly Average 30 Year Treasury Rate ⁴	Market Risk Premium (MRP)
1							
2							
3	Nov	2.60%	2.60%	+ 13.41%	= 16.01%	= 4.52%	= 11.49%
4	Dec 2007	2.61%	2.61%	+ 13.51%	= 16.12%	= 4.52%	= 11.60%
5	Jan 2008	2.67%	2.67%	+ 15.19%	= 17.86%	= 4.33%	= 13.53%
6	Feb	2.74%	3.19%	+ 16.47%	= 19.66%	= 4.52%	= 15.14%
7	Mar	2.85%	3.35%	+ 17.64%	= 20.99%	= 4.39%	= 16.60%
8	Apr	2.69%	3.11%	+ 15.73%	= 18.84%	= 4.44%	= 14.40%
9	May	2.73%	3.15%	+ 15.51%	= 18.66%	= 4.60%	= 14.06%
10	Jun	3.13%	3.71%	+ 18.51%	= 22.22%	= 4.69%	= 17.53%
11	Jul	3.15%	3.74%	+ 18.61%	= 22.35%	= 4.57%	= 17.78%
12	Aug	3.06%	3.59%	+ 17.08%	= 20.67%	= 4.50%	= 16.17%
13	Sep	3.07%	3.66%	+ 19.30%	= 22.96%	= 4.27%	= 18.69%
14	Oct	4.31%	5.63%	+ 30.53%	= 36.16%	= 4.17%	= 31.99%
15	Nov	4.97%	6.71%	+ 35.02%	= 41.73%	= 4.00%	= 37.73%
16	Dec 2008	4.44%	5.76%	+ 29.82%	= 35.38%	= 2.87%	= 32.51%
17	Jan 2009	4.86%	6.32%	+ 30.02%	= 36.34%	= 3.13%	= 33.21%
18	Feb	5.50%	7.43%	+ 35.13%	= 42.56%	= 3.59%	= 38.97%
19	Mar	4.21%	5.36%	+ 27.33%	= 32.69%	= 3.64%	= 29.05%
20	Apr	3.66%	4.47%	+ 22.05%	= 26.52%	= 3.76%	= 22.76%
21	May	3.46%	4.14%	+ 19.67%	= 23.81%	= 4.23%	= 19.58%
22	Jun	3.25%	3.87%	+ 19.16%	= 23.03%	= 4.52%	= 18.51%
23	Jul	2.90%	3.37%	+ 16.31%	= 19.68%	= 4.41%	= 15.27%
24	Aug	2.82%	3.22%	+ 14.21%	= 17.43%	= 4.37%	= 13.06%
25	Sep	2.80%	3.20%	+ 14.32%	= 17.52%	= 4.19%	= 13.33%
26	Oct	2.75%	3.15%	+ 14.48%	= 17.64%	= 4.19%	= 13.45%
27							
28							
29	Short-term Trends						
30	Recent Twelve Months Avg	3.72%	4.50%	+ 22.02%	= 26.62%	= 3.98%	= 22.64%
31	Recent Nine Months Avg	3.48%	4.25%	+ 20.30%	= 24.54%	= 4.10%	= 20.44%
32	Recent Six Months Avg	3.00%	3.49%	+ 16.36%	= 19.85%	= 4.32%	= 15.53%
33	Recent Three Months Avg	2.79%	3.19%	+ 14.34%	= 17.53%	= 4.25%	= 13.28%
34							
35	Recommended	3.00%	3.49%	+ 16.36%	= 19.85%	= 4.32%	= 15.53%
36							
37							
38							
39							
40							
41							

¹ Average Current Dividend Yield (D/P) of dividend paying stocks. Data from Value Line Investment Analyzer Software Data - Value Line 1700 Stocks

² Expected Dividend Yield (D/P) equals average current dividend yield (D/P) times one plus growth rate (g).

³ Average 3-5 year price appreciation (annualized). Data from Value Line Investment Analyzer Software Data - Value Line 1700 Stocks

⁴ Monthly average 30 year U.S. Treasury. Federal Reserve.

Litchfield Park Service Company
Test Year Ended September 30, 2008
Capital Asset Pricing Model (CAPM)

Exhibit
Rebuttal Schedule D-4.13
Witness: Bourassa

Line No.	Rf	+	beta ³	x	Rp	=	k
1							
2							
3	2.8%	+	0.80	x	6.9% ⁴	=	8.3%
4							
5	4.3%	+	0.80	x	15.5% ⁵	=	16.7%
6							
7							
8							12.5%
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

¹ Federal Reserve November 20, 2009 average of 5, 7 and 10 year Treasury rates (Rf)

² Federal Reserve November 20, 2009 30 year Treasury rate (Rf)

³ Value Line Investment Analyzer data. See Sched. D-4.11

⁴ Historical Market Risk Premium from (Rp) MorningStar SBI 2009 Yearbook Table A-2 Intermediate-Horizon ERP 1926-2008

⁵ Computed using DCF constant growth method to determine current market return on Value Line 1700 stocks and CAPM with beta of 1.0 to compute Current Market Risk Premium (Rp). See Sched. D-4.12.

**TJB-RB-COC
(Phase I)**

ATTACHMENT 1

Litchfield Park Service Company
Size Premium¹

Attachment 1

Line No.	Beta(β)	Size Premium	Risk Premium for Small Water Utilities ⁷
1			
2			
3			
4			
5			
6	1.12	0.90%	
7			
8	1.25	1.56%	
9			
10	1.50	2.83%	
11			
12	1.62	4.43%	1.81%
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			

Estimated Risk Premium for small water utilities⁶

0.99%

¹ Data from Table 7-11 of Morningstar, Ibbotson S&P 2009 Valuation Yearbook.

² Mid-Cap companies includes companies with market capitalization between \$1,850 million and \$7,360 million.

³ Low-Cap companies includes companies with market capitalization between \$454 million and \$1,849 million.

⁴ Micro-Cap companies includes companies with market capitalization less than \$453 million.

⁵ Decile 10 includes companies with market capitalization between \$1.6 million and \$219 million.

⁶ From Table 2, Thomas M. Zepp, "Utility Stocks and the Size Effect Revisited," *The Quarterly Review of Economics and Finance*, 43 (2003), 578-582.

⁷ Computed as the weighted differences between the Decile 10 risk premium and the indicated risk premiums for the sample water utilities as shown below. Excludes risk due to differences in beta.

Market Cap.	Class	Size Premium	Difference	Weight	Weighted Size Premium
1. American States	587 Low-Cap	1.56%	2.87%	0.166667	0.48%
2. Aqua America	2,365 Mid-Cap	0.90%	3.53%	0.166667	0.59%
3. California Water	794 Low-Cap	1.56%	2.87%	0.166667	0.48%
4. Connecticut Water	193 Decile 10	4.43%	0.00%	0.166667	0.00%
5. Middlesex	205 Decile 10	4.43%	0.00%	0.166667	0.00%
6. SJW Corp.	408 Micro-Cap	2.83%	1.60%	0.166667	0.27%
Weighted Size Premium for Small Companies					1.81%

**TJB-RB-COC
(Phase I)**

ATTACHMENT 2

Attachment 2

Litchfield Park Service Company
Discounted Cash Flow Analysis (Water)
Constant Growth DCF Model - Historical
Using Compound 10 Year Historical Dividend Growth

Line No.	[1]	[2]	[3]	[4]	[5]
	Current Dividend Yield (D_0/P_0) ¹	Expected Dividend Yield (D_1/P_0) ²	Staff Historical Div. Growth (g) ³	Indicated Equity Cost k=Div Yld + G (Cols 2+3)	Indicated Equity Cost k=Div Yld + G (Cols 2+3)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

* Indicated equity cost below current cost of debt (Baa) or negative growth.

¹ Spot Dividend Yield = D_0/P_0 . See Schedule D.4-8

² Expected Dividend Yield = $D_1/P_0 = D_0/P_0 * (1+g)$.

³ Growth rate (g). From Staff work papers.

⁴ Federal Reserve. Baa investment grade bonds.

⁵ Blue Chip Financial Forecast (Dec 2009)

**TJB-RB-COC
(Phase I)**

ATTACHMENT 3

Litchfield Park Service Company
Discounted Cash Flow Analysis (Water)
Constant Growth DCF Model - Historical
Using 10 Year Historical EPS Growth

Line No.	(1)	[2]	[3]	[4]	[5]
	Current Dividend Yield (D_t/P_0) ¹	Expected Dividend Yield (D_t/P_0) ²	Staff Historical EPS Growth (g) ³	Indicated Equity Cost k=Div Yld + G (Cols 2+3)	Indicated Equity Cost k=Div Yld + G (Cols 2+3)
1					
2					
3					
4					
5					
6					
7	1. American States	2.88%	3.68%	6.7%	6.7%
8	2. Aqua America	3.24%	6.20%	9.6%	9.6%
9	3. California Water	2.98%	2.74%	5.8%	*
10	4. Connecticut Water	3.86%	1.05%	4.9%	*
11	5. Middlesex	4.53%	2.88%	7.5%	7.5%
12	6. SJW Corp.	2.87%	3.05%	6.0%	*
13					
14					
15	GROUP AVERAGE	3.5%	3.3%	6.8%	8.0%
16	GROUP MEDIAN	3.3%	3.0%	6.3%	7.5%
17					
18	Current Baa interest rate (October 2009) ⁴			6.3%	
19					
20	Blue Chip Forecast Baa Corporate Bond Interest Rate 2012 Top 10 ⁵				
21	Blue Chip Forecast Baa Corporate Bond Interest Rate 2012 Bottom 10 ⁵				
22	Blue Chip Forecast Baa Corporate Bond Interest Rate 2012 Consensus ⁵				
23					
24					
25					
26					
27					
28					
29					
30					
31					

* Indicated equity cost below current cost of debt (Baa) or negative growth.

¹ Spot Dividend Yield = D_t/P_0 . See Schedule D.4-8

² Expected Dividend Yield = $D_t/P_0 = D_0/P_0 * (1+g)$.

³ Growth rate (g). Staff work papers.

⁴ Federal Reserve. Baa investment grade bonds.

⁵ Blue Chip Financial Forecast (Dec 2009)

**TJB-RB-COC
(Phase I)**

ATTACHMENT 4

Attachment 4

Litchfield Park Service Company
Discounted Cash Flow Analysis (Water)
Market Price

Line No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Company	2009 Projected Div	10 year Historical Average Div	Recent Price	10 year Historical Annual Price Growth	Year 5 Price	Recent Price	Year 1 Div	Year 2 Div	Year 3 Div	Year 4 Div	Year 5 Div + Price	Implied ROE = Internal Rate of Return (Cols 7-12)
1	1. American States	\$ 1.03	1.76%	\$ 31.94	9.72%	\$ 50.79	\$ (31.94)	\$ 1.03	\$ 1.05	\$ 1.07	\$ 1.09	\$ 51.90	12.5%
2	2. Aqua America	0.55	6.97%	15.88	9.75%	25.29	(15.88)	0.55	0.59	0.63	0.67	26.01	13.0%
3	3. California Water	1.18	0.90%	35.78	8.42%	53.59	(35.78)	1.18	1.26	1.35	1.44	55.05	11.6%
4	4. Connecticut Water	0.89	1.22%	22.80	6.28%	30.92	(22.80)	0.89	0.95	1.02	1.09	32.02	10.2%
5	5. Middlesex	0.71	1.91%	15.91	7.37%	22.70	(15.91)	0.71	0.76	0.81	0.87	23.59	11.8%
6	6. SJW Corp.	0.72	6.01%	22.18	14.89%	44.39	(22.18)	0.72	0.77	0.82	0.88	45.32	17.7%
7													
8													
9													
10													
11													
12													
13													
14	GROUP AVERAGE				9.40%								12.8%
15	GROUP MEDIAN				9.07%								12.1%
16													
17													
18													
19													
20													
21	Sources:												
22	Value Line Data November 20, 2009												
23	Yahoo Finance Website November 20, 2009												
24													
25													
26													

Sources:
Value Line Data November 20, 2009
Yahoo Finance Website November 20, 2009

**TJB-RB-COC
(Phase I)**

ATTACHMENT 5

**NEW
REGULATORY
FINANCE**

Roger A. Morin, PhD

**2006
PUBLIC UTILITIES REPORTS, INC.
Vienna, Virginia**

Appendix 4-A

Arithmetic versus Geometric Means in Estimating the Cost of Capital

The use of the arithmetic mean appears counter-intuitive at first glance, because we commonly use the geometric mean return to measure the average annual achieved return over some time period. For example, the long-term performance of a portfolio is frequently assessed using the geometric mean return.

But performance appraisal is one thing, and cost of capital estimation is another matter entirely. In estimating the cost of capital, the goal is to obtain the rate of return that investors expect, that is, a target rate of return. On average, investors expect to achieve their target return. This target expected return is in effect an arithmetic average. The achieved or retrospective return is the geometric average. In statistical parlance, the arithmetic average is the unbiased measure of the expected value of repeated observations of a random variable, not the geometric mean. This appendix formally illustrates that only arithmetic averages can be used as estimates of cost of capital, and that the geometric mean is not an appropriate measure of cost of capital.

The geometric mean answers the question of what constant return you would have had to achieve in each year to have your investment growth match the return achieved by the stock market. The arithmetic mean answers the question of what growth rate is the best estimate of the future amount of money that will be produced by continually reinvesting in the stock market. It is the rate of return which, compounded over multiple periods, gives the mean of the probability distribution of ending wealth.

While the geometric mean is the best estimate of performance over a long period of time, this does not contradict the statement that the arithmetic mean compounded over the number of years that an investment is held provides the best estimate of the ending wealth value of the investment. The reason is that an investment with uncertain returns will have a higher ending wealth value than an investment which simply earns (with certainty) its compound or geometric rate of return every year. In other words, more money, or terminal wealth, is gained by the occurrence of higher than expected returns than is lost by lower than expected returns.

In capital markets, where returns are a probability distribution, the answer that takes account of uncertainty, the arithmetic mean, is the correct one for estimating discount rates and the cost of capital.

While the geometric mean is appropriate when measuring performance over a long time period, it is incorrect when estimating a risk premium to compute the cost of capital.

TABLE 4A-1
GEOMETRIC VS. ARITHMETIC RETURNS

	Stock A	Stock B
1996	50.0%	11.61%
1997	-54.7%	11.61%
1998	98.5%	11.61%
1999	42.2%	11.61%
2000	-32.3%	11.61%
2001	-39.2%	11.61%
2002	153.2%	11.61%
2003	-10.0%	11.61%
2004	38.9%	11.61%
2005	20.0%	11.61%
Standard Deviation	64.9%	0.0%
Arithmetic Mean	26.7%	11.6%
Geometric Mean	11.6%	11.6%

Theory

The geometric mean measures the magnitude of the returns, as the investor starts with one portfolio and ends with another. It does not measure the variability of the journey, as does the arithmetic mean. The geometric mean is backward looking. There is no difference in the geometric mean of two stocks or portfolios, one of which is highly volatile and the other of which is absolutely stable. The arithmetic mean, on the other hand, is forward-looking in that it does impound the volatility of the stocks.

To illustrate, Table 4A-1 shows the historical returns of two stocks, the first one is highly volatile with a standard deviation of returns of 65% while the second one has a zero standard deviation. It makes no sense intuitively that the geometric mean is the correct measure of return, one that implies that both stocks are equally risky since they have the same geometric mean. No rational investor would consider the first stock equally as risky as the second stock. Every financial model to calculate the cost of capital recognizes that investors are risk-averse and avoid risk unless they are adequately compensated for undertaking it. It is more consistent to use the mean that fully impounds risk (arithmetic mean) than the one from which risk has been removed (geometric mean). In short, the arithmetic mean recognizes the uncertainty in the stock market while the geometric mean removes the uncertainty by smoothing over annual differences.

Empirical Evidence

If both the geometric and arithmetic mean returns over the 1926–2004 data are regressed against the standard deviation of returns for the firms in the

deciles, the arithmetic mean outperforms the geometric mean in this statistical regression. Moreover, the constant of arithmetic mean regression matches the average Treasury bond rate and therefore makes economic sense while the constant for the geometric mean matches nothing in particular. This is simply because the geometric mean is stripped of volatility information and, as a result, does a poor job of forecasting returns based on volatility.

The following illustration is frequently invoked in defense of the geometric mean. Suppose that a stock's performance over a two-year period is representative of the probability distribution, doubling in one year ($r_1 = 100\%$) and halving in the next ($r_2 = -50\%$). The stock's price ends up exactly where it started, and the geometric average annual return over the two-year period, r_g , is zero:

$$\begin{aligned} 1 + r_g &= [(1 + r_1)(1 + r_2)]^{1/2} \\ &= [(1 + 1)(1 - .50)]^{1/2} = 1 \\ r_g &= 0 \end{aligned}$$

confirming that a zero year-by-year return would have replicated the total return earned on the stock. The expected annual future rate of return on the stock is not zero, however. It is the arithmetic average of 100% and -50%, $(100 - 50)/2 = 25\%$. There are two equally likely outcomes per dollar invested: either a gain of \$1 when $r = 100\%$ or a loss of \$0.50 when $r = -50\%$. The expected profit is $(\$1 - \$0.50)/2 = \$0.25$ for a 25% expected rate of return. The profit in the good year more than offsets the loss in the bad year, despite the fact that the geometric return is zero. The arithmetic average return thus provides the best guide to expected future returns.

What Academics Have to Say

Bodie, Kane, and Marcus (2005) cite:

Which is the superior measure of investment performance, the arithmetic average or the geometric average? The geometric average has considerable appeal because it represents the constant rate of return we would have needed to earn in each year to match actual performance over some past investment period. It is an excellent measure of *past* performance. However, if our focus is on future performance, then the arithmetic average is the statistic of interest because it is an unbiased estimate of the portfolio's expected future return (assuming, of course, that the expected return does not change over time). In contrast, because the geometric return over a sample period is always less than the arithmetic mean,

it constitutes a downward-biased estimator of the stock's expected return in any future year.

Again, the arithmetic average is the better guide to future performance.

Another way of stating the Bodie, Kane, Marcus argument in favor of the arithmetic mean is that it is the best estimate of the future value of the return distribution because it represents the expected value of the distribution. It is most useful for determining the central tendency of a distribution at a particular time, that is, for cross-sectional analysis. The geometric mean, on the other hand, is best suited for measuring an investment's compound rate of return over time, that is, for time-series analysis. This is the same argument made by Ibbotson Associates (2005) where it is shown, using probability theory, that future terminal wealth is given by compounding the arithmetic mean, and not the geometric mean. In other words, if we accept the past as prologue, the best estimate of a future year's return based on a random distribution of the prior years' returns is the arithmetic average. Statistically, it is our best guess for the holding-period return in a given year.

Brigham and Ehrhardt (2005) in their widely used corporate finance text point out that the arithmetic average is more consistent with CAPM theory, as one of its key underpinning assumptions is that investors are supposed to focus, in their portfolio decisions, upon returns in the next period and the standard deviation of this return. To the extent that this next period is one year, the preference for the arithmetic mean, which derives from a set of single one year period returns, follows. It is also noteworthy that one of the crucial assumptions inherent in the CAPM is that investors are single-period expected utility of terminal wealth maximizers who choose among alternative portfolios on the basis of each portfolio's expected return and standard deviation.

Brealey, Myers, and Allen (2006) in their leading graduate textbook in corporate finance opt strongly for the arithmetic mean. The authors illustrate the distinction between arithmetic and geometric averages and conclude that arithmetic averages are appropriate when estimating the cost of capital:

The proper uses of arithmetic and compound rates of return from past investments are often misunderstood. Therefore, we call a brief time-out for a clarifying example.

Suppose that the price of Big Oil's common stock is \$100. There is an equal chance that at the end of the year the stock will be worth \$90, \$110, or \$130. Therefore, the return could be -10 percent, $+10$ percent or $+30$ percent (we assume that Big Oil does not pay a dividend). The expected return is $1/3(-10 + 10 + 30) = +10$ percent.

If we run the process in reverse and discount the expected cash flow by the expected rate of return, we obtain the value of Big Oil's stock:

$$PV = \frac{110}{1.10} = \$100$$

The expected return of 10 percent is therefore the correct rate at which to discount the expected cash flow from Big Oil's stock. It is also the opportunity cost of capital for investments which have the same degree of risk as Big Oil.

Now suppose that we observe the returns on Big Oil stock over a large number of years. If the odds are unchanged, the return will be -10 percent in a third of the years, $+10$ percent in a further third, and $+30$ percent in the remaining years. The arithmetic average of these yearly returns is

$$\frac{-10 + 10 + 30}{3} = +10\%$$

Thus the arithmetic average of the returns correctly measures the opportunity cost of capital for investments of similar risk to Big Oil stock.

The average compound annual return on Big Oil stock would be

$$(.9 \times 1.1 \times 1.3)^{1/3} - 1 = .088, \text{ or } 8.8\%$$

less than the opportunity cost of capital. Investors would not be willing to invest in a project that offered an 8.8 percent expected return if they could get an expected return of 10 percent in the capital markets. The net present value of such a project would be

$$NPV = -100 + \frac{108.8}{1.1} = -1.1$$

Moral: If the cost of capital is estimated from historical returns or risk premiums, use arithmetic averages, not compound annual rates of return (geometric averages).

(Richard A. Brealey, Stewart C. Myers, and Paul Allen, *Principles of Corporate Finance*, 8th Edition, Irwin McGraw-Hill, 2006, page 156–7.)

The widely cited Ibbotson Associates publication also contains a detailed and rigorous discussion of the impropriety of using geometric averages in estimating the cost of capital.¹²

¹² Ibbotson Associates, *Stocks, Bonds, Bills, and Inflation, 2005 Yearbook, Valuation Edition*, page 75.

The arithmetic average equity risk premium can be demonstrated to be most appropriate when discounting future cash flows. For use as the expected equity risk premium in either the CAPM or the building block approach, the arithmetic mean or the simple difference of the arithmetic means of stock market returns and riskless rates is the relevant number. This is because both the CAPM and the building block approach are additive models, in which the cost of capital is the sum of its parts. The geometric average is more appropriate for reporting past performance, since it represents the compound average return.

The argument for using the arithmetic average is quite straightforward. In looking at projected cash flows, the equity risk premium that should be employed is the equity risk premium that is expected to actually be incurred over the future time periods.

The best estimate of the expected value of a variable that has behaved randomly in the past is the average (or arithmetic mean) of its past values.

In their widely publicized research on the market risk premium, Dimson, Marsh and Staunton (2002) state

The arithmetic mean of a sequence of different returns is always larger than the geometric mean. To see this, consider equally likely returns of +25 and -20 percent. Their arithmetic mean is $2\frac{1}{2}$ percent, since $(25 - 20)/2 = 2\frac{1}{2}$. Their geometric mean is zero, since $(1 + 25/100) \times (1 - 20/100) - 1 = 0$. But which mean is the right one for discounting risky expected future cash flows? For forward-looking decisions, the arithmetic mean is the appropriate measure.

To verify that the arithmetic mean is the correct choice, we can use the $2\frac{1}{2}$ percent required return to value the investment we just described. A \$1 stake would offer equal probabilities of receiving back \$1.25 or \$0.80. To value this, we discount the cash flows at the arithmetic mean rate of $2\frac{1}{2}$ percent. The present values are respectively $\$1.25/1.015 = \1.22 and $\$0.80/1.025 = \0.78 , each with equal probability, so the value is $\$1.22 \times \frac{1}{2} + \$0.80 \times \frac{1}{2} = \1.00 . If there were a sequence of equally likely returns of +25 and -20 percent, the geometric mean return will eventually converge on zero. The $2\frac{1}{2}$ percent forward-looking arithmetic mean is required to compensate for the year-to-year volatility of returns.

Lastly, on the practical side, Bruner, Eades, Harris, and Higgins (1998) found that 71% of the texts and tradebooks in their extensive survey of practice supported use of an arithmetic mean for estimation of the cost of equity.

Mean Reversion Argument

Some academics have argued that if stock returns were expected to revert to a trend, this would suggest the use of a geometric mean since the geometric mean is, by definition, an estimate of a smoothed long-run trend increment. These same academics have argued that the historical estimate of the market risk premium (“MRP”) is upward-biased by the buoyant performance of the stock market prior to 2002, and because of the extraordinary and unusually high realized MRPs in those years, investors expect a return to lower MRPs in the future, bringing the average MPR to a more “normal” level.

The presence or absence of mean reversion is an empirical issue. The empirical findings are weak and highly contradictory; the empirical evidence is inconclusive and unconvincing, certainly not enough to support the “mean reversion” hypothesis. The weight of the empirical evidence on this issue is that the more sophisticated tests of mean reversion in the MRP demonstrate that the realized MRP over the last 75 years or so was almost perfectly free of mean reversion, and had no statistically identifiable time trend. It is also noteworthy that most of these studies were performed prior to the stock market’s debacle in 2000–2002, years of extraordinary and unusually low realized MRPs. The stock market’s dismal performance of 2000–2002 has certainly taken the wind out of the mean reversion school’s sails.

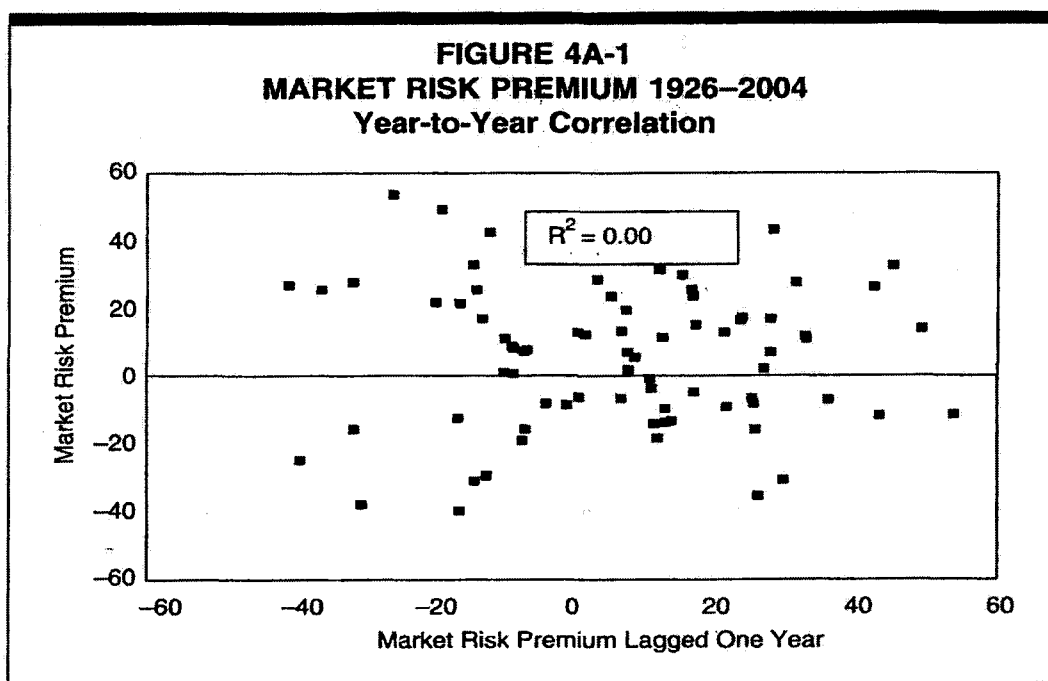
An examination of historical MRPs reveals that the MRP is random with no observable pattern. To the extent that the estimated historical equity risk premium follows what is known in statistics as a random walk, one should expect the equity risk premium to remain at its historical mean. Therefore, the best estimate of the future risk premium is the historical mean.

Ibbotson Associates (2005) find no evidence that the market price of risk or the amount of risk in common stocks has changed over time:

Our own empirical evidence suggests that the yearly difference between the stock market total return and the U.S. Treasury bond income return in any particular year is random . . . there is no discernable pattern in the realized equity risk premium. (Ibbotson Associates, *Stocks, Bonds, Bills, and Inflation, 2005 Yearbook, Valuation Edition*, pages 74–75)

In statistical parlance, there is no significant serial correlation in successive annual market risk premiums, that is, no trend. Ibbotson Associates go on to state that it is reasonable to assume that these quantities will remain stable in the future (*Id.*):

The best estimate of the expected value of a variable that has behaved randomly in the past is the average (or arithmetic mean)



of its past values. (Ibbotson Associates, *Stocks, Bonds, Bills, and Inflation, 2004 Yearbook, Valuation Edition*, page 75)

Nowhere is it suggested by Ibbotson Associates that the market risk premium has declined over time.

Because there is little evidence that the MRP has changed over time, it is reasonable to assume that these quantities will remain stable in the future. Figure 4A-1 shows the relationship, or the lack of relationship, between year-to-year MRPs reported in the Ibbotson Associates Valuation Yearbook, 2005 edition, for the 1926–2004 period. The relationship is virtually absent, as indicated by the low R^2 of zero between successive MRPs. In other words, there is no history in successive MRPs as indicated by the zero serial correlation coefficient.

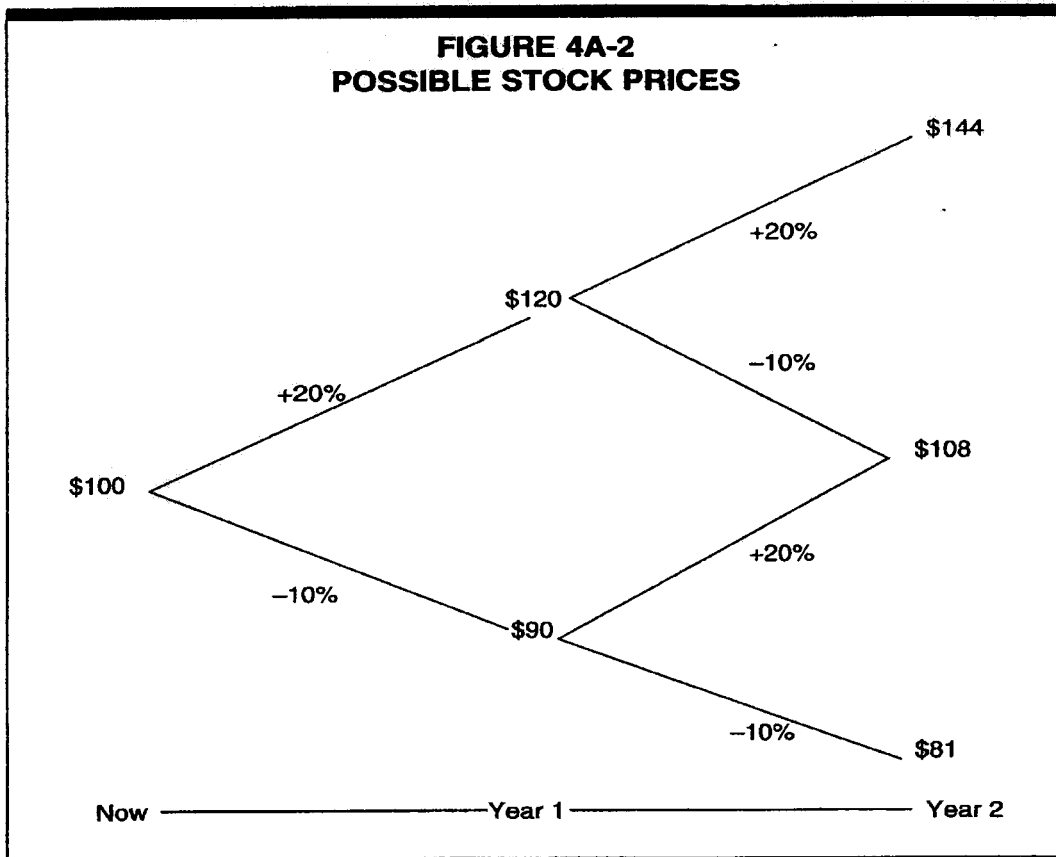
In short, the determination of the cost of capital with the CAPM requires an unbiased estimate of the expected annual return. The expected arithmetic return provides the appropriate measure for this purpose.

Formal Demonstration

This section shows why arithmetic rather than geometric means should be used for forecasting, discounting, and estimating the cost of capital.¹³ By

¹³ This section is adapted from a similar treatments and demonstration in Brealey, Myers, and Allen (2006) and Ibbotson Associates (2005).

**FIGURE 4A-2
POSSIBLE STOCK PRICES**



definition, the cost of equity capital is the annual discount rate that equates the discounted value of expected future cash flows (from dividends and the sale of the stock at the end of the investor's investment horizon) to the current market price of a share in the firm. The discount rate that equates the discounted value of future expected dividends and the end of period expected stock price to the current stock price is a prospective arithmetic, rather than a prospective geometric, mean rate of return. Since future dividends and stock prices cannot be predicted with certainty, the "expected" annual rate of return that investors require is an average "target" percentage rate around which the actual, year-by-year returns will vary. This target rate is, in effect, an arithmetic average.

A numerical illustration will clarify this important point. Consider a non-dividend paying stock trading for \$100 which has, in every year, an equal chance of appreciating by 20% or declining by 10%. Thus, after one year, there is an equal chance that the stock's price will be \$120 and an equal chance the price will be \$90. Figure 4A-2 presents all possible eventualities after two periods have elapsed (the rates of return are presented at the end of the lines in the diagram).

The possible stock prices are shown in the following table.

TABLE 4A-2
STOCK PRICES AFTER TWO PERIODS

Price	Chance
\$144	1 chance in 4
\$108	2 chances in 4
\$ 81	1 chance in 4

The expected future stock price after two periods is then:

$$1/4 (\$144) + 2/4 (\$108) + 1/4 (\$81) = \$110.25$$

The cost of equity capital is calculated as the discount rate that equates the present value of the future expected cash flows to the current stock price. In the present simple example, the only cash flow is the gain from selling the stock after two periods have elapsed. Thus, using the expected stock price of \$110.25 calculated above, the expected rate of return is that r , which solves the following equation:

$$\text{Current Stock Price} = \frac{\text{Expected Stock Price}}{(1 + r)^2}$$

The factor $(1 + r)^2$ discounts the expected stock price to the present. Substituting the numerical values, we have:

$$\begin{aligned} \$100 &= \frac{\$110.25}{(1 + r)^2} \\ r &= 5\% \end{aligned}$$

Thus, the cost of equity capital is 5%. This 5% cost of equity capital is equal to the prospective arithmetic mean rate of return, which is the probability-weighted average single period rate of return on equity. Since in every period there is an equal chance that the stock's return will be 20% or -10%, the probability-weighted average is:

$$1/2 (20\%) + 1/2 (-10\%) = 5\%$$

However, the 5% cost of equity capital is not equal to the prospective geometric mean rate of return, which is a probability-weighted average of the possible compounded rates of return over the two periods. Now consider the prospective geometric mean rate of return. Table 4A-3 shows the possible compounded rates of return over two periods, and the probability of each.

Thus, the prospective geometric mean rate of return is:

$$1/4 (20\%) + 2/4 (3.92\%) + 1/4 (-10\%) = 4.46\%$$

TABLE 4A-3
STOCK PRICES AND RETURNS AFTER TWO PERIODS

Price	Chance	Compounded Return
\$144	1 chance in 4	20.00%
\$108	2 chances in 4	3.92%
\$ 81	1 chance in 4	- 10.00%

This return is not equal to the 5% cost of equity capital.

The example can easily be extended to include the case of a dividend-paying company and will reach the same conclusion: the implied discount rate calculated in the DCF model is an expected arithmetic rather than an expected geometric mean rate of return.

The foregoing analysis shows that it is erroneous to use a prospective multi-year geometric mean rate of return as a "target" rate of return for each year of the period. If, for example, investors currently require an expected future rate of return on an investment of 13% each year, then 13% is the appropriate annual rate of return on equity for ratemaking purposes. Consequently, in using a risk premium approach for the purposes of rate of return regulation, the single-year annual required rate of return should be estimated using arithmetic mean risk premiums.

It should be pointed out that the use of the arithmetic mean does not imply an investment holding period of one year. Rather, it is premised on the uncertainty with respect to each year's return during the holding period, however many years that may be. When computing the arithmetic average of historic annual returns in order to calculate the average return (expected value of the return), every achieved return outcome is one possible future outcome for each year the security will be held. Each historic return has an equal probability of occurring during each year of the holding period. The resulting expected value of the risk premium is the arithmetic average of all of the past premiums considered, regardless of the length of the expected holding period.